THE Nation's Schools

New AASA President Is Interviewed

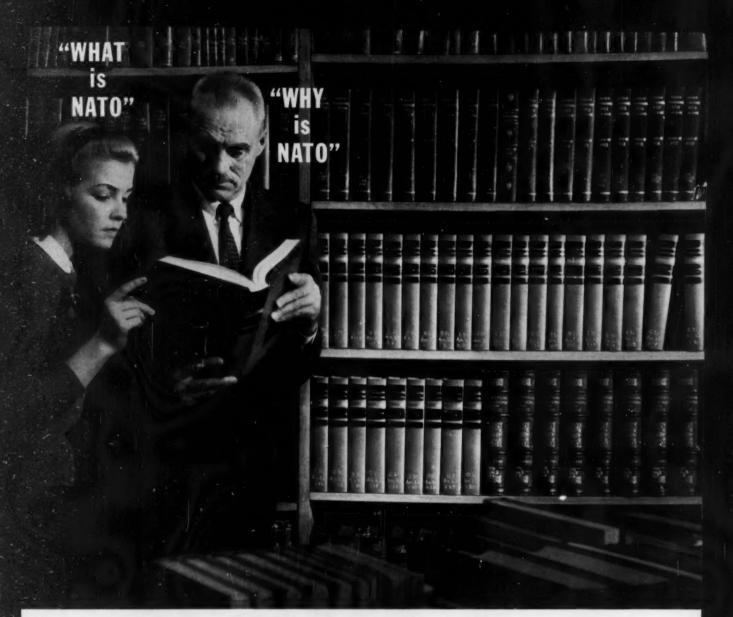
+ Warehousing Can
Be Wasteful + 'No'
to a Round Classroom + Administrators Meet for Regional Convention
in San Francisco +
High School Principals Convention



APRIL



LEARNING SITUATIONS were created when elementary pupils at Winchell School, Kalamazoo, Mich., made their new school (at left) a part of their curriculum (page 82).



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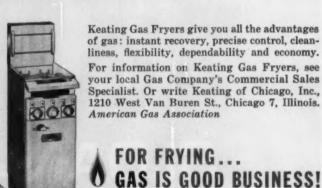
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THE Nation's Schools

APRIL 1961

A Philosophy of Education 71 Benjamin C. Willis

In an interview, the new president of the American Association of School
Administrators discloses his viewpoints on budgeting time,
pressures of the superintendency, vocational education, finance, federal aid,
team teaching, and a program of administrative decentralization.

Warehousing Can Be Wasteful! 77 Gordon C. Caswell

An Arizona survey reveals that school districts may be losing money by storing large quantities of supplies. The study shows that economies are realized when vendors deliver directly to the individual schools instead of delivering to a central warehouse, with redistribution by the district.

Parliamentary Procedure Is Best Policy at Board Meetings 92 Lee O. Garber

Parliamentary law avoids mistakes and misunderstandings, but failure to use such procedures does not automatically invalidate board action. New Hampshire court warns against official neglect of duty or violation of statute.

A.A.S.A. Maps 'Education for the Challenges of Tomorrow' 93

In San Francisco, site of the first of three regional conventions of the American Association of School Administrators, schoolmen from 14 states prepared to meet future challenges of education. Subjects analyzed ranged from too much homework to international problems in education.

No Single Formula for Planning 'the School' 101

There's no one answer as to what is the best use of space, materials or design in schoolhouse planning, concludes the six-man jury selecting the plans that are included in the school building architectural exhibits at the A.A.S.A. regional meetings. More than 80 building plans were exhibited in San Francisco.

Better Articulation at All Educational Levels 107

Meeting in Detroit, the 45th annual convention of the National Association of Secondary-School Principals demonstrates ways to achieve better articulation at all educational levels. Improving the continuity of the curriculum in the transition from school to college is essential.

Interview Reveals Resignation Requested of N.S.B.A. Official 110

The sudden resignation of the executive director of the National School Boards Association at the request of the association's executive committee has caused much national interest. Circumstances pertaining to this resignation are revealed in the editor's interview with key individuals.

Vel. 67 No. 4

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Continued on next page

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THE Nation's Schools

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OPINION POLL

Schoolmen Would Keep Corners in School Areas 81

Regardless of the trend toward round areas in school buildings, it is still taboo as far as most administrators in this poll are concerned. The majority would keep square corners because "they're useful."

SCHOOLHOUSE PLANNING

A 'New School' Curriculum 82 M. Whitcomb

As a building research project, second graders studied and wrote reports about all the materials used in constructing their new one-story cluster-type elementary school in Kalamazoo, Mich.

SCHOOL LUNCH

Analyze New School Lunch Trends and Products 108 T. G. Flanagan

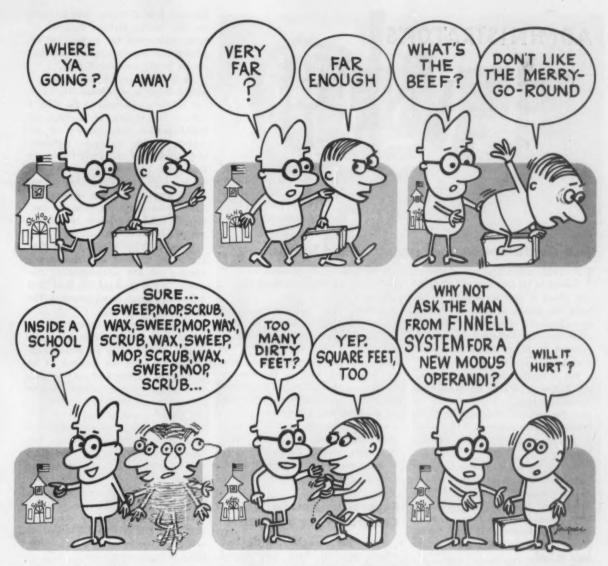
Total food offerings, says the author, should be limited to those necessary to meet the nutritional needs of pupils. She recommends that new trends and products be analyzed to make lunches nutritionally better.

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By CALVIN GRIEDER
Professor of School Administration
University of Colorado

Self-Contained Classrooms Are Hard To Find

Is the self-contained classroom about to be cast into the discard? For about a quarter century it has been the dominant type of elementary classroom organization. Teacher education curriculums have been planned to fit it, and school plant design has taken it into account.

But a revival of departmentalization has set in, which, combined with "team teaching," seems certain to give the self-contained classroom its quietus — until researchers rediscover it perhaps another quarter century hence.

Some departmentalization has been employed for many years by elementary schools, in such subjects as music, art and physical education. This often is referred to as semi-departmentalization. In fact, completely self-contained classrooms are hard to find.

The introduction of foreign languages in elementary schools has led to some further departmentalization with the appointment of special language teachers, many of whom serve two or more schools.

Team teaching inherently places a premium on subject matter specialization, particularly by the leader of a team. And some research indicates that pupils learn more in departmentalized schools. One investigator is quoted as saying: "A group of teachers who have specialized in their fields can do a much better job than one teacher trying to teach several different subjects."

All this suddenly conspires to raise doubts about and finally to condemn the self-contained classroom. The disadvantages of departmentalization that seemed weighty 30 years ago are now being explained away or overcome, and its advantages are advanced.

Probably there are good and bad things about each plan, and there are teachers who do well in one or the other. A clear-cut case has not been made out for either. Those who are concerned, such as the elementary principals' national organization, say that more research must be done to establish the superiority of one over the other. Right now nobody knows for sure which plan is superior. It is quite possible that neither type of organization will be proved better than the other under all conditions.

Supervision Can Be Constructive or Destructive

From the viewpoint of a high school teacher, here are second thoughts on supervision, a follow-up to the suggestion made in the Clinic that supervision is on the way out.

By reason of several years of undergraduate work in my field (social studies) and the earning of a master's degree in the same area, I consider myself more expert in that field than my principal or the central office supervisor. Fortunately, my studies in education (20 undergraduate semester hours and six graduate) have given me some insight into the necessity of supervisory service.

I believe that my view of the teaching job is somewhat less narrow than that of most teachers. Several cogent reasons for the existence of supervisory service come to mind;

likewise, several reasons may be cited for the hearty distaste evinced by some instructors for supervision by professional supervisors. Let the latter be briefly considered first.

As a minor expert in my field, I would object to supervision by someous totally uninformed in the field. I believe that technics of teaching are less important than mastery of the subject matter. However, virtually everyone agrees nowadays that some reasonable degree of mastery of methodology is important for success in teaching. Only a few of the most intransigent extremists pose the outmoded either-or choice of subject matter mastery or methodology.

I would object to supervision that had as its objective only the smooth running of the administrative machine, losing track of the fact that individual pupil development is the central aim of teaching.

I would object to supervision imposed in an arbitrary manner on the teaching corps, with no understanding of the need for teachers to be thoroughly informed of and to participate in decisions about "where they are going" and why.

I would object to supervision that had as its only or its chief apparent goal the collection of data for research, with little or no productive result feeding back to the instructional staff.

I would object to supervision that amounts to nothing more than inspectional service, while welcoming that type which through inspection and other measures gives back something to improve my work.

Lastly, I would object to supervision that relies on "inspiration" or "pep talks." What I want and need are the facts, not the inspirational feeling, of which I already have enough. I like to teach, want to teach, am not weary of teaching, and consequently stand less in need of inspiration than of the goods, which will enable me to attain continuing success in teaching.

I have an idea of what constitutes success in teaching and am ready and willing to adopt supervisory suggestions that promote it. Among the elements of success I include not only pupil mastery of the fundamentals of the field in which I teach, but also the cultivation of ideals and attitudes proper to worthy citizenship.

I believe that one of the most po-(Continued on Page 10)

^{*}Grieder, Calvin: A New Definition for Supervision, The Nation's Schools 65:6 (June) 1960.

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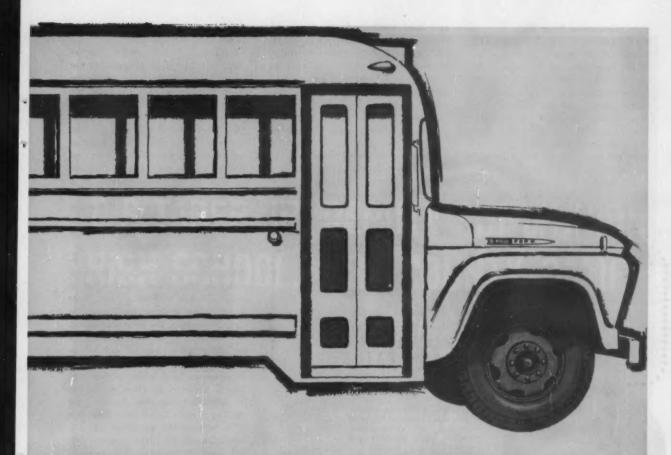
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(Continued From Page 6)

tent elements in stimulating teachers to high achievement is the inching up of the pay check, on the basis of improved performance evaluated by the fairest measures available. If supervisory services can be of that kind of help to me, if the fiscal policies of the board of education harmonize with the supervisory program in this way, some otherwise objectionable features may be overlooked.

On the other side of the argument, I welcome supervision of the type mentioned in the following paragraphs. From my educational studies and later reading, I am convinced that supervision is essential to articulate the work of the entire system of elementary and secondary schools, to coordinate extracurricular activities and the other numerous tasks of the school today.

I know that changes in the pupil personnel, in the character of American life, in the prospects of our pupils as they mature necessitate the services of educational experts who specialize in keeping abreast of current trends and have the equipment (both in knowledge and materials) to adapt the school's program to meeting bet-

ter the needs of pupils in contemporary life.

I realize fully the need for supervision to induct new teachers into the service, new either to the system or to the profession, and the need for keeping experienced teachers up to date in their respective fields, especially where they teach in more than one field. I also believe that supervision tends to keep teachers more "on their toes" than they would otherwise be. Further, an outside check on a teacher's work is desirable: If a teacher is doing a good job, he wants someone else to know about it; if he is doing a poor job, he ought to want to know about it himself.

I welcome supervision that provides me with a wealth of teaching materials from other schools, not so much because I want to use them in toto, but because they give me ideas for varying my own procedures.

I welcome supervision that brings me authoritative data on instructional methods, not only in my own but in other teaching fields. (Often successful methods in other fields can be adapted to my own needs.) I try to keep abreast in my own field, but welcome what the supervisor may discover through his wider contacts.

I welcome supervision that engages me in research activities either independently or in conjunction with other teachers in the system, in the county, or in the state.

I welcome supervision that is friendly, helpful, but positive. Vague suggestions? No. Arbitrary imposition? No. But direct suggestions, cooperative working out of problems? Yes.

I welcome supervision that has always as its central concern the improvement of pupil growth through the improvement of teachers, not the self-advancement of supervision or of supervisors, the promotion of a "vested" interest.

I welcome supervision that gives credit where credit is due, and not only orally. For example, in reports of experiments, in progress reports of current inquiries, and the like, I should like to be given credit by name for whatever part I might have. I might even welcome the chance to write such a report myself once in a while, if the necessary data were in my possession. I also should welcome credit in the form of increased pay, leave of absence for study or travel, and promotion in my own sphere.



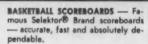
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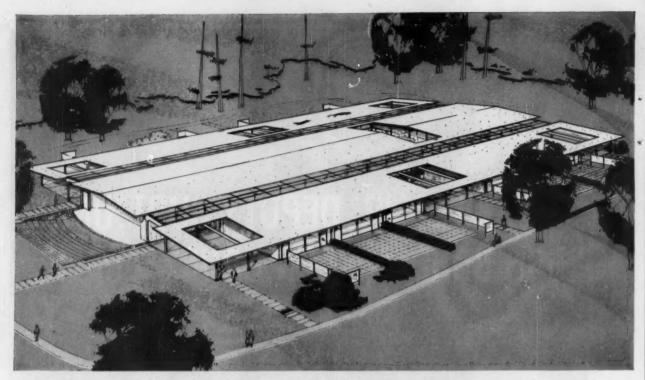
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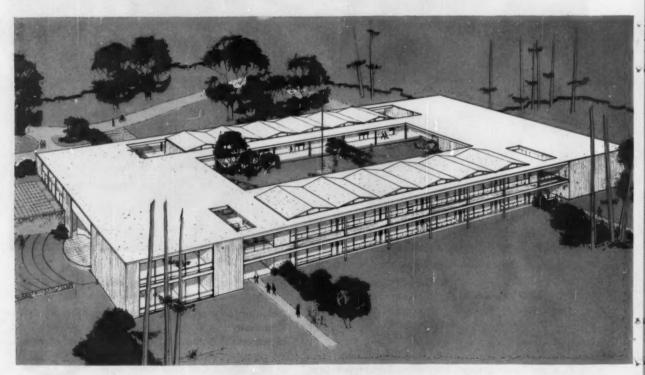
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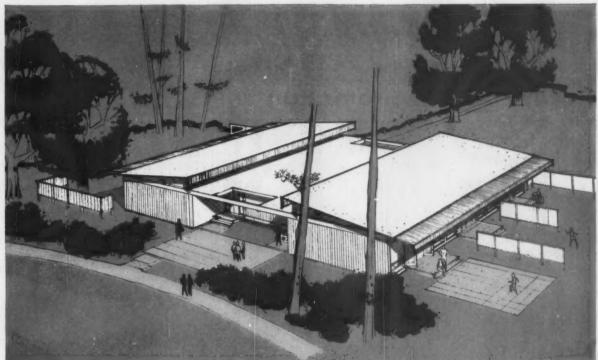
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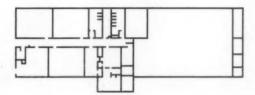












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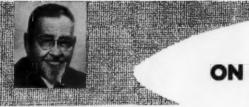


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with James M. Spinning

When we have the wheat all sifted. And we know which are the gifted, Shall we just accelerate, Or segregate . . . or mitigate? How best ARE the gifted lifted?

NEW APPROACHES TO THE EDU-CATION OF THE GIFTED. By Cyril W. Woolcock. Silver Burdett Company, Morristown, N.J., 1961. Pp. 112, 82,

PROGRAMS FOR THE GIFTED. By Samuel Everett, editor. Harper and Brothers, New York, 1961. Pp. 299. \$5.50.

HERE are two of the most recent books with sober answers for those doggerel questions. The first deals primarily with research findings and principles. The second, although it also examines the nature and needs of the gifted, is a case book describing typical programs in three foreign countries and six American communities. It is good to take them in a single study bout. Each is a major contribution to our

Both books express concern that only a quarter of the students in the top 25 per cent go on to finish college. Both are disturbed over America's preoccupation with the values of the market place and what might be called spectator citizenship.

Our effort should be not to impose fixed molds of thought but to encourage the gifted to develop their talents for creative thinking and the possible redirection of ours. Too much of the present emphases for the gifted centers in the reproduced thought and imitation that results in rigid minds and fixed ideas. In an open-end society, we need open-end thinking.

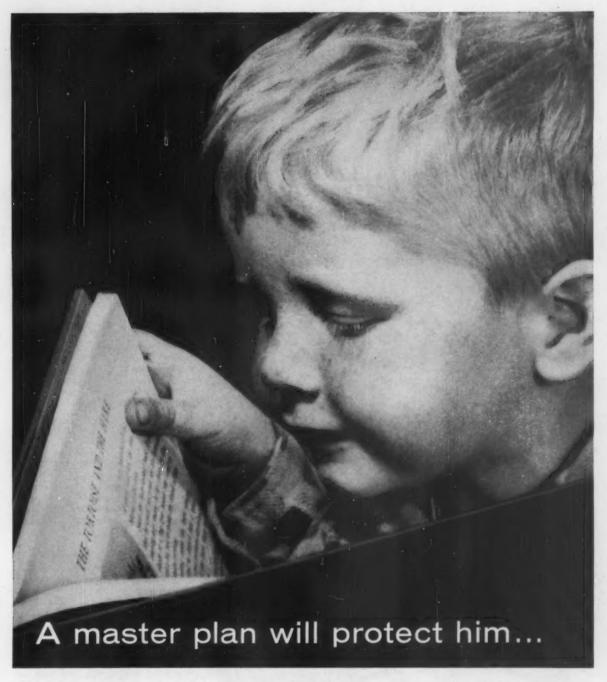
Dr. Woolcock, former school superintendent in Michigan and Ohio, is the principal of New York City's Hunter College High School. He spent the school year 1958-59 on detached service as coordinator of education for the gifted in New York State.

Dr. Woolcock is emphatically for early programing for the gifted as well as early identification, for ability grouping, and for vertical guidance of gifted children. He is strong for acceleration (no grade skipping, please), plans tailored to the individual, escape from the usual school rigidities, and greater play for inner-directed drives. He has small use for the vague and relatively unplanned enrichment that turns into busy work. It is too often only lateral in scope, he says, and has small support from research. He is afraid of hit and/or miss programs and of a bandwagon that might roll too routelessly.

The gifted need no such step-by-step instruction as the rest of us do. They should have more of the college-type of teaching, less of the equal time treatment that is part of the Carnegie unit fetish, more variety, some short sixto-eight-week courses, small seminar groups, studio-type instruction for those with talent in the creative arts, and occasional classes of 50 to 200 under gifted teacher-lecturers who are fully panoplied in audio-visual aids. The gifted need individual appraisal rather than the usual test taking and grade getting, more reliance on inherent incentive (more scope for initiative), less planning for and more planning with - as well as imaginative and versatile teachers who aren't rotated just for the sake of rota-

We must have new evidence and more research, too. (Terman and Witty have disabused us of the crazy stereotype of the gifted youngster as a sickly goggleeyed misfit, freak in body as in brain.) Now we need to resist another popular misconception - the intelligence quotient is a simple, fixed, numerical thing, differing only in degree and not in kind. The public should be reminded that a dollar may be variously composed of pennies, nickels, dimes, quarters and half dollars. The I.Q. is merely the sum of ratings on various kinds of abilities variously present. We need to sort out the traits and bundles of traits that index different kinds of superiority - mathematical, scientific, artistic, verbal, social, political and other. Then we can better predict and better serve our Barry Rudds.

Dr. Woolcock also advocates the ap-(Continued on Page 28)



Complete fire protection for life and property in all of its schools is Chicago's goal for 1960. And phase one of this sweeping program is already well under way!

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compliance with the ordinance.

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(Continued From Page 26)
plication of money to our programs; he
thinks extra sums are as well spent on
fast as on slow learners.

To help the handicapped makes sense,

But why no spur for excellence? Great results can spring direct from Working both ends of the spectrum.

THE case book of programs for the gifted is published as the Fifteenth Yearbook of the John Dewey Society. It contains 12 chapters by 15 contributors. (These men did not meet as a group. But through correspondence their work

was coordinated by their chairman and editor. A beautiful job he has made of it — as well as of his own three chapters.)

As author of the section on the nature and nurture of the gifted, Paul Witty is, of course, both a valued exponent and protagonist. Like Dr. Woolcock, he prefers the simple definition of the gifted child as "one who shows consistently remarkable performance in any worthwhile endeavor." He, too, marks for special handling those who possess remarkable creative skills but not necessarily remarkable I.Q.'s.

He notes sadly that as many fail to go to college for lack of a college goal as for lack of funds. The offerings of too many high schools are too meager to provide incentive. While the gifted show fewer deviations in mental health than other students, their frustrations occur on a higher level. It is interesting to observe that pupils of high verbal ability display fewer emotional problems than others . . . and to speculate as to which is cause and which is effect.

The men who do the chapters on foreign schools point sharply to certain virtues but, unlike Admiral Rickover, do not suggest that we adopt their educational structure. Our authors cleave pretty well to the cosmopolitan school as our answer.

Although European countries provide increasing opportunity for their superior students, including stipends to all who need them, one finds no evidence of such organized or agonized talent search as that newly born in the United States. For the most part, the gifted are left to discover themselves, stimulated by the whip of parental and class drive, and by the carrots of prestige and economic reward.

Stiff examinations assist the uncovering for the quality schools of Germany and England. In Russia, says Goodwin Watson, education of the specially talented, except in music and ballet, is not differentiated until the years of higher education. But stiff courses pretty well assure that only top-flight students survive to attempt the upper years of the secondary school.

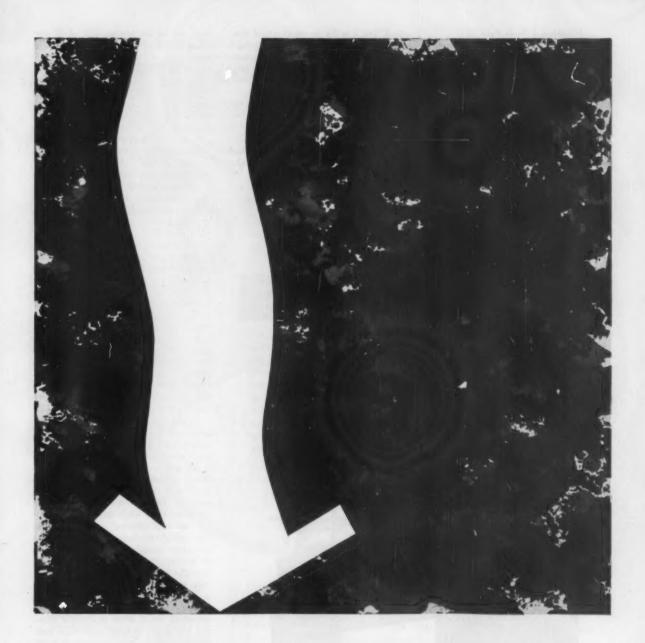
One heavy point is that their youngsters work and are worked harder than ours. In Russia (for example) where both parents toil six long days each week, children are not distracted by the sight of adults at play. Their society puts such a premium on scholarship that even among teen-agers it is respectable to be a "brain." Culture is not a matter for the schools alone. It is part of the party line. Those who fall behind in classes are denied the extracurricular programs which the communist youth organizations provide.

Maybe America could profit from a better balance of theoretical and practical courses for both our gifted and our slow learners. (Maybe we could aid our identification of promising students by supplementing written with oral tests, as Russia does in some cases.) And surely our rich country could do better than it has in subsidizing special education. Just as surely our schools alone cannot combat successfully the intellectual laziness of American adults or the silly notion that excellence is something too good for democracy.

That the commitment to high intellectual standards is still at peak in the German gymnasium is evidenced by the hour requirements and samples of set papers and examinations — to ensure better absorption and escape the perils

(Continued on Page 30)





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(Continued From Page 28)

of "finish and forget." German schools, like those of Russia and England, schedule most major subjects only two or three times a week but for twice as many years as we do.

The British, like the Americans, have their contradictions. With all their love of freedom they do not think of people as social equals. So says Prof. Everett as he points to their secondary school hierarchy. It is the tradition-hallowed grammar school that the top 20 to 25 per cent attend. The next group goes to the technical school, and all the others go to the general or "modern" secondary

school. Yet, it is the grammar school that teaches freedom. It stresses independence of thought, the right and obligation to stand alone if necessary, and being sturdy in one's own castellated convictions.

The reports on six typical American programs for the gifted should be studied by two groups of school people: (1) those with patterns of their own, which they wish to compare; (2) those whose consciences tell them they ought to get going.

The programs cited range from an area-wide seminar in rural Lewis County, New York, to the high-stepped performance of the Bronx High School of Sci-

ence, where the median I.Q. of all students is 140. They include the enrichment plan of the Germantown Friends School in Philadelphia, the core-centered program of the University High School of Ohio State, the individual instruction in unsorted classes plus special advanced courses at the Ulysses S. Grant High School of Portland, Ore., and the diversified program of Evanston Township High School in Evanston, Ill.

Some of the subject offerings read just like those of any good high school of 50 years ago. But when you look at the content (the "new math," advanced biology, three kinds of calculus, problems of communication, values and beliefs), you feel the difference.

The subjects which the young people of these schools probe in their seminars and laboratories and the books they read command admiring respect. A group at the Friends School may elect to pursue the theme of "freedom and responsibility" or "man's answer to suffering." Incipient scientists at the Bronx High School of Science may do research on local radioactive fall-out or work to develop a heat-resistant strain of Bacillus subtilis. One youngster at the University High School reads LaFarge, Sartre and Kerouac; another reports on Andre Gide and Sherwood Anderson.

To inspire and guide this sort of thing takes exceptional teachers, and these schools have them. The faculty at Evanston Township has discovered that its job is not just to get out of the way of the gifted and let them learn, as some of us have airily suggested. Positive help is essential. Teachers must create learning situations that, while friendly and helpful, are well oriented and challenging. The gifted teachers of the gifted at Evanston Township have no lighter loads or heavier pay than other teachers, but they like it there.

It is not surprising that the schools on the emulation list are most often those institutions that can select their students and those which enjoy exceptional material and moral support from their communities. These are the ones that can add an extra teaching and guidance staff, most easily recruit the versatile teachers needed, and provide adequate libraries and laboratories.

But the old shoestring can do a lot, too, when it's well tied. Certainly, one of the most appealing ventures is in Lewis County. Here, in a remodeled store at Lyons Falls, some 20 top-ranking young people come once each week from schools all over the area to widen their horizons and deepen their understanding. With their teachers they plan their reading, listening and viewing, then select for discussion and further study topics of universal interest. They trip sometimes to the cities for good music

(Continued on Page 150)

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Vol. 67, No. 4, April 1961

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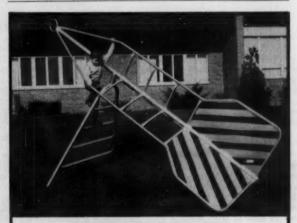


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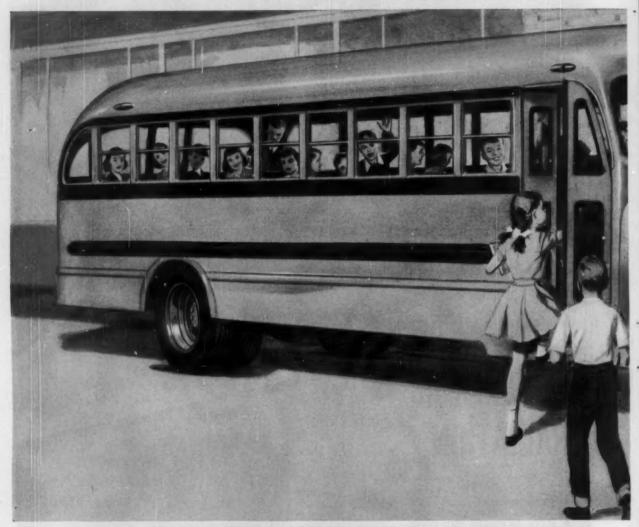
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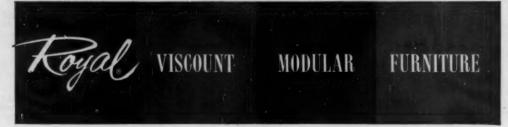
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Model SD **Deluxe Stainless Steel** Three Door, Single Tank



Model Y3 FUL-VUE 36" Counterbalanced Door Single Tank

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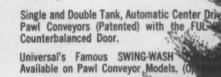


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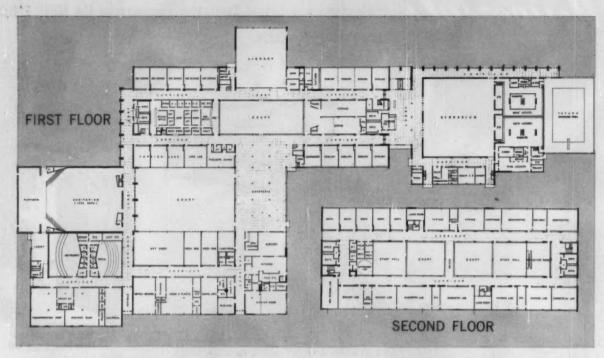
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PLANNING THE NEW SCHOOL

A population explosion at Parma, Ohio completely overtaxed secondary school facilities. Rather than expand the old school, construction of the new Valley Forge High School was started in May of 1960 and scheduled for completion in advance of the school year beginning September 1961 at a completed cost of \$4,000,000. The new structures — containing 70 classrooms, adequate library, science, language, shop and music facilities, as well as an ample auditorium, cafeteria and gymnasium — is planned to accommodate 2,000 students. Despite these impressive new facilities, plans are now being made for a third secondary school.

The Parma Public Schools, Mr. Paul W. Briggs, Superintendent — were advised in their choice and installation of Time Controls by:

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FLOOR AREA ONE MAN IN SQ. FT. WITH MOP		ONE MAN WITH CLARKE-A-MATIC	HOURS
10,000	10 hrs.	34 hrs.	91/4 hrs.
20,000	20 hrs.	1½ hrs.	18½ hrs.
50,000	50 hrs.	4 hrs.	46 hrs.
100,000	100 hrs.	8 hrs.	92 hrs.

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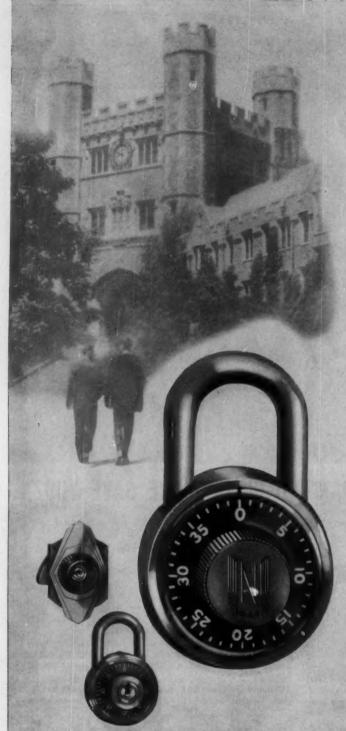






Vol. 67, No. 4, April 1961

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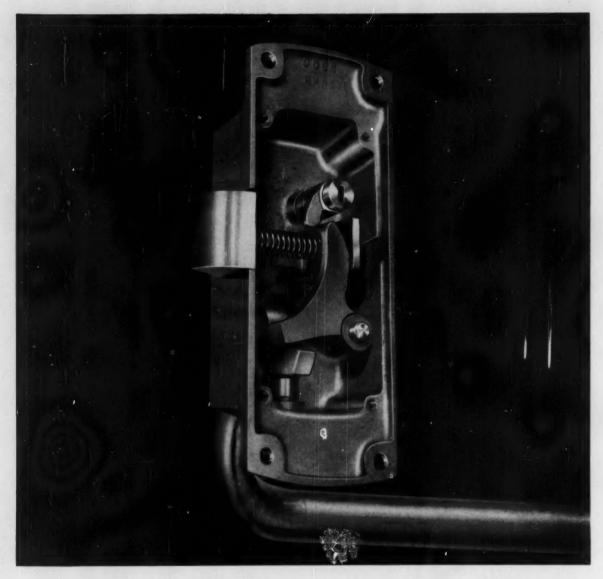








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Imaginative Engineering Puts to Work on DAYLIGHT



Mike Best and Ed Kralevec, mechanical engineers on the Madanna school, shown discussing job details with two of their colleagues.

Kralovec & Best, consulting engineers, went one step further in their heat and ventilation design for the new Madonna High School, Chicago — they applied pneumatic control to skylight louvers.

To meet the lighting requirements of the combination auditorium-gymnasium, architect C. I. Krajewski used a system of sky domes equipped with adjustable light dampers. How to control the dampers quickly and efficiently for change-over from plenty of daylight for gym activities to total blackout for movies, etc., was the problem presented to the consulting engineer.

Kralovec & Best's solution was — twenty-nine 4-inchpowerstroke piston damper motors — one for each of



Powers Pneumatic Control



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Chicage, III.
Architect: C. I. Krajewski, Chicage
Consulting Engineers:
Kralovec & Best
Chicago
Heating Contractor:
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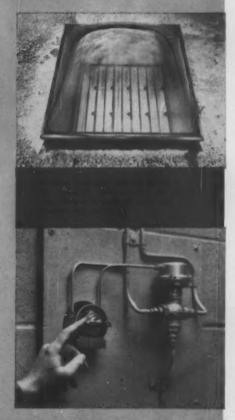
the sky dome louvers on the roof — energized instantly from a single Powers pneumatic selector switch in the projection room. Turning the switch activates air pressure at 15 psi. through a Powers Series 500 Pilot Valve to the motors to close the light louvers. When the switch is turned off, pressure is released . . . and the louvers swing open to admit light.

Pneumatic control of daylight in Madonna school is fast, easy and quiet — a definite convenience for the projectionist or instructors, an operational bargain for the school, maintenance-wise.

The complete heating system, as specified by Kralovec & Best, includes two hot water converters controlled at fixed temperatures. Individual classrooms are heated and ventilated by unit ventilators, controlled on the standard day-night cycle. Corridors, rest rooms, storage and locker rooms employ direct radiation controlled by Powers Day-Night room thermostats. For extra safety and comfort, hot water to all showers is controlled by means of a Powers Hydroguard Thermostatic Shower Control.

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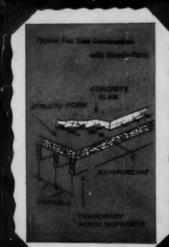
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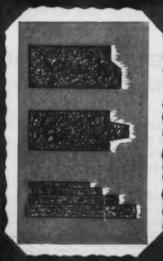
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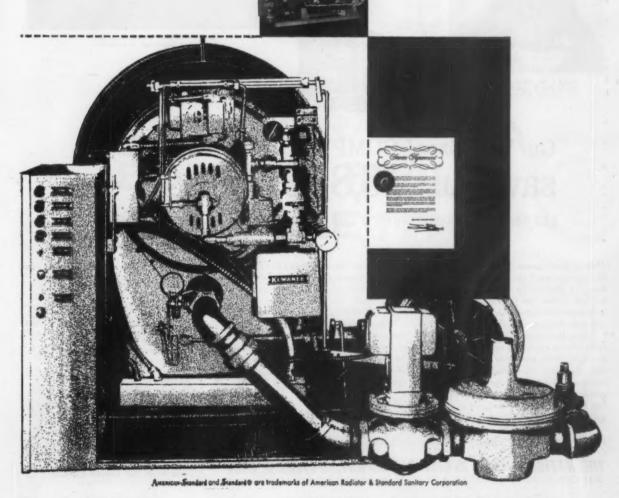
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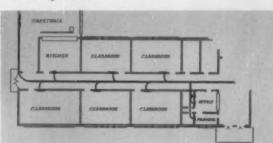
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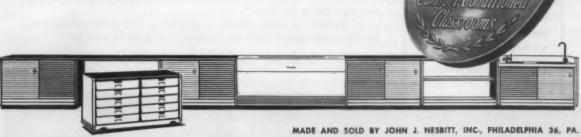
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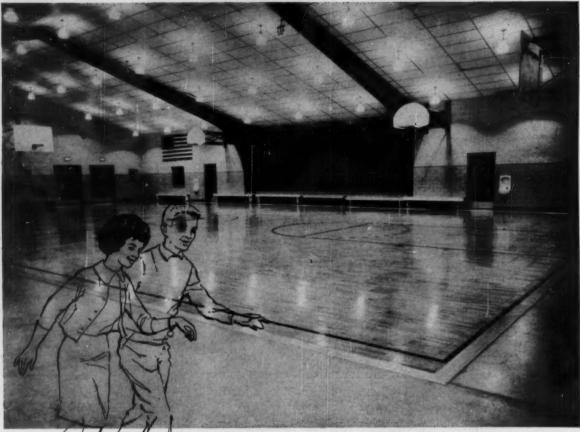
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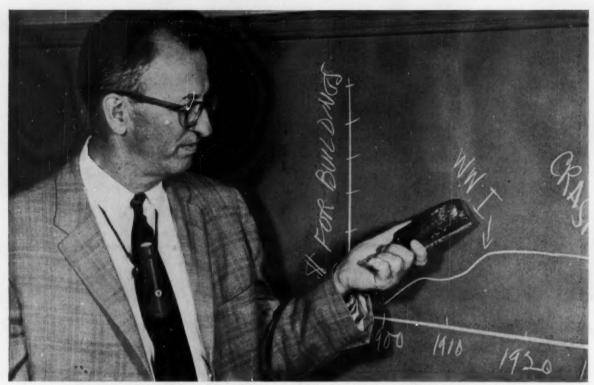
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Over 41 years of research at Huntington Laboratories has resulted in a wide range of products developed especially for gym floor care. Each is easy to use, and each helps keep gym floors in perfect playing condition longer.

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NAME TITLE

SCHOOL

ADDRESS

CITY

STATE

LOOKING FORWARD

Views From San Francisco

WE'RE writing these random observations at the close of the A.A.S.A. regional meeting in San Francisco. Nothing is more delightful than an assignment in this fascinating city, but we wonder whether it is wise - or even fair - to hold a third regional conference in this area.

The theory is excellent - that every third year three regional meetings be held so that a greater number of administrators can afford to attend - but it doesn't always work out so well in practice. Take this convention, for example. It is reported to us officially that approximately 4000 people registered. It is our observation that less than 15 per cent of this number were in attendance at some of the general sessions. In fact, A.A.S.A. officials admit that the small attendance at several of the general sessions was "embarrassing."

The underground exhibit hall is an ideal place for both the commercial and architectural exhibits, but it was much too quiet and peaceful during many hours of the convention. It cost these exhibitors more than half a million dollars to bring and maintain this educational wonderland for the conventioneers, most of whom were elsewhere - some of them busy sightsee-

A Californian said to us: "At the section programs I attended, most of the people were fellow Californians." In our conversation that followed, he observed that the West Coast states have excellent state conventions of their own. The A.A.S.A. meetings in the East or the Midwest give administrators an opportunity to get away from their own region at least once a year to rub elbows and exchange ideas with people in other parts of the country. He thought that perhaps two rather than three regional conferences every third year might be feasible.

We'll be happy to come back to San Francisco any time for an A.A.S.A. regional program. We're only observing that the regional conference in this cosmopolitan city (as also was true in 1958) has been rough on speakers and exhibitors.

The Visit of Four Wise Men

HIGHLIGHTING the general programs for us at San Francisco was the panel of four speakers from other lands. Arabian and Islam cultures, more so than the efforts of the Western governments, are checking

the spread of communism in the Middle East, maintained Abdul Majid Abbass, visiting professor of Middle Eastern studies at American University, Washington. D.C.

Education may take the lead in the integration of Western European nations, ventured Hans Reimers, a minister of education in Germany.

The representative from New Zealand, C. E. Beeby, said little about education in his country because it so nearly resembles our own, but he made an observation that frequently is overlooked: Because of the depth of individualism in teaching, educational reform does not move forward smoothly. When reform takes place, there's a sliding and cutting action rather than a forward movement on a solid front.

Because he seemed to know whereof he spoke, we are doubly alarmed by the warnings from Theodore H. E. Chen, head of the department of Asiatic studies of the University of Southern California. Said Dr. Chen: "When we observe Communist education so specifically designed to produce the mental outlook, the production skills, and the emotional loyalties demanded by the Communist ideology, we may well be challenged to examine our own program and ask whether our education serves our democracy as well as the way Communist education serves communism."

Tramp, Tramp No More

YOU have tramped through exhibit halls at conventions many times, and have been weary but rewarded for your efforts. If you had the power to change the arrangements or procedures for the commercial exhibits at the A.A.S.A., what would you do? The opportunity to make some suggestions to representatives of the exhibitors and to A.A.S.A. officials has been provided at each of the three regional meetings.

Here in San Francisco, one suggestion was universally acclaimed: Exhibits pertaining to similar services or products should be grouped together. Thus, if a man is looking at school furniture he can compare the products of Exhibitor A with those of Exhibitors B, C and D.

If this grouping is not possible, said one speaker, let's identify different types of exhibits by colors or lights. Others suggested that opportunities should be provided so that exhibits could be dramatized, even to the extent of completely equipping a classroom. Facetious speakers also suggested that the free drinks and souvenirs be more numerous, and that visitors be carried through exhibit halls on a conveyer belt so they can observe the exhibits while seated. Speakers disagreed as to the feasibility of awards for the best exhibits, but all of them urged "a more positive approach," stressing that "visiting the exhibits is not a duty but rather a tremendous opportunity."

One statement by Finis Engleman at this meeting should be shouted across the continent. Said the A.A.S.A. executive secretary: "If the Administration really wants to get us out of this recession, it should give priority to schoolhouse construction. Building schoolhouses will provide much more employment than

building roads."

Conner Answers the Press

A T THE first press conference, the newspaper boys tried to put words in the mouth of President Forrest Conner. Queried one reporter: "Isn't it true that the A.A.S.A. supported the National Defense Education Act when it was first introduced?"

President Conner replied: "The A.A.S.A. never has supported the N.D.E.A. We are not only willing to let it die, but will assist its demise. The funds now going to the N.D.E.A. should be used for direct grants to the states to improve education in every area. The N.D.E.A. is categorical control — the worst kind of federal control. By giving aid in certain areas the government it telling the schools what to teach. Funds have been drained off the arts and music programs to get money to match the federal grants in three other areas. The English and social studies programs also have suffered."

Another reporter argued that school buildings are too expensive. Responded President Conner: "There are no bargains in school buildings. You either pay for a good building now, or you pay out as much or more in additional maintenance costs over the years."

Supt. Conner explained that the principal cost of public education is the expenditure for personnel. "Any attempt to make a major reduction in school costs would simply be coming out of teachers' salaries," he said. "The increase in school population, the continuing effects of inflation, and the greater demands upon the schools mean that the cost of education may double within the next ten years."

The Power of an Idea

WE WANTED some of that old-fashioned stuff called inspiration — and we thought we might get it from Arthur Corey's address at the Phi Delta Kappa luncheon during the San Francisco A.A.S.A. meeting. We were richly rewarded. His theme was appropriate for these frustrating days. It was:

"No matter how humble the place you occupy, it is always possible to lead. The most irresistible power

in the universe can be a big idea."

A.A.S.A. Regional Conference, San Francisco, February 25.

He told us a heart tugging story of Johann Heinrich Pestalozzi, the Swiss "almost-a-beggar" who is revered today as the father of popular education. Pestalozzi was 30 years old at the time our forefathers were signing the Declaration of Independence. He had failed in theology, had abandoned the study of law, and had lost his land as an unsuccessful farmer. But during these days, said Dr. Corey, he "had become almost obsessed with the idea that the only certain road to social improvement was public education. In his 35th year, he published a short novel, 'Leonard and Gertrude.' It has one central idea: the social effectiveness of education. . . . "

The next 45 years of his life is the story of unending effort, under circumstances of almost abject poverty, to demonstrate his ideas of popular education and to teach others his philosophy and methods. He died at the age of 80, in what seemed to be failure and

defeat. Said Dr. Corey:

"Pestalozzi was great for what he thought and not because of what he did. Some men are great not for what they themselves do but for what other men do because of them. He conceived of the possibilities of the universal school open to all children and distinct from the church. He was the first great lay educator. Just as his love, when he was alive, seemed to conquer all who approached him, his sentiments and ideals can still stimulate noble emulation and dedicated careers....

"Herbert Spencer in his essay on education mentions none of all his forerunners in educational matters save Pestalozzi alone. This strange Swiss reformer was the chief inspiration for Henry Barnard and for Horace Mann. Critics seem to agree that more than any other individual, Pestalozzi is responsible for the present widespread acceptance of compulsory education of all the children at public expense. . . .

"Pestalozzi demonstrated that the most irresistible power in the universe can be a big idea. Such an idea must be more than just any sound intellectual or philosophical concept. To be sure, a big idea must embody essential truth and must be significant. No amount of slogan slinging or propagandistic palaver will sanctify fallacy or ennoble parsimony. The big idea must be true and significant and must then be

vitalized by faith, interest and sacrifice.

"Pestalozzi's big idea is still big enough to deserve the dedication and support of all of us. Simply stated: Humanity can only be ennobled through education. Herbert Spencer stated eloquently Pestalozzi's big idea: 'The only way of putting an end to social disorder, the fermentations and popular revolutions, as well as the abuses of despotism both of princes and the multitude, is to ennoble man.' There are other big ideas already awaiting the prophets who will clothe them with zeal and enthusiasm and make them live, such as the idea of a truly wise and competent profession of teachers — the idea of making education a real factor in waging peace in the world."

The Editor

BENJAMIN WILLIS, Chicago superintendent, new A.A.S.A. president, lunches with his three grandchildren — Henry, Lawrie and Hillary. They are the children of Dr. Willis' only daughter, Mrs. Henry Bischoff. Mr. Bischoff is a teacher at Evanston Township High School in Evanston, Ill. Grandpa was about to take the children to see Santa Claus at a downtown Chicago department store when this picture was taken.



A Philosophy for Administration

An interview with BENJAMIN C. WILLIS, president, A.A.S.A.

by Arthur H. Rice

ALTHOUGH aptly described as "the man in a hurry," the new president of the American Association of School Administrators, Benjamin C. Willis, is not in a hurry to promote a program of his own for the association. His philosophy for the A.A.S.A. will be the same as his philosophy for the administration of Chicago public schools, namely, that the function of the administrator is to serve.

"I shall look to the staff, to the committees, to the study groups, and to the membership of the association for ideas and recommendations before I decide on the program to which I will want to give emphasis during my presidency," said President Willis. Dr. Willis officially took office March 15 as president of the A.A.S.A., after having served a year as president-elect. (Although he refuses to say so, it is generally believed that he recently turned down an invitation to become United States Commissioner of Education.)

The results of his endless energy as general superintendent of Chicago public schools for nearly eight years are evidenced in the fact that the total budget for public schools in Chicago has nearly doubled within that period of time. In fact, his philosophy is expressed dramatically by his achievements.

(Cont. on Next Page)



MRS. BENJAMIN WILLIS
(nee Rachel Webster) frequently
accompanies her husband to
A.A.S.A. meetings. Shown here,
the couple are leaving the
convention hall in Atlantic City
during the 1960 annual meeting.

B ENJAMIN C. WILLIS was born and educated in the state of Maryland. Here, he followed the success pattern of boy behind the plow, one-room school teacher, principal and county superintendent of schools.

Leaving Maryland, he took threeyear stopovers in Yonkers, N.Y., and Buffalo on his way to Chicago. All his pent-up energy, passion for action, and accomplishment were unleashed in 1953, when he assumed the superintendency of the second largest city in the United States.

From his first day on the job until now, he has been knocking down the old shibboleths that kept a big city school system from being great. A single salary schedule was the first impossibility that fell, followed quickly by the collapse of the idea that outside architects could not be used in the mammoth building program that was just being launched.

In 1953, Chicago elementary teachers were paid \$3000 a year and secondary school teachers, \$3460. Under today's single salary schedule four lanes are established in accordance with training.

The Chicago salary schedule today is bachelor's degree, \$5100; master's degree, \$5350; master's degree plus

36 hours graduate credit, \$5600, and Ph.D., \$5850. Maximum salaries for the same lanes are \$8500, \$9000, \$9500 and \$10,000.

Using 34 outside architects in addition to the Chicago public school architects, approximately 122 buildings and 109 additions are now completed or under way. One hundred fifty-five sites have been acquired or are in process of being acquired. To date, this work has encumbered approximately \$175 million of a \$200 million bonding power granted the board of education by Chicago citizons.

All this work was but a prelude to the real task Dr. Willis has assumed of making education in a big city as good as that in the best of America's suburbs. To accomplish this end, he decentralized the school system into community schools, each in charge of a district superintendent.

There are now 20 of these districts, and the educational program under the district superintendent's direction is a continuous process from kindergarten through high school. Educational specialists in the central office become resource people for the district. Because cities are big, they can afford to provide resources that

no suburban school in the United States is able to afford.

The big city in recent years has followed educational innovations. Now, in Chicago, the administration is using the best minds in the country to help find answers to the perplexing problems of "education for the future." It is a dynamic school system, visited each year by thousands of visitors from this country and abroad.

The man, Ben Willis, who has brought a city school system pride and recognition, is a contradiction. He is a tireless executive who has dedicated virtually every waking moment to the cause of education. He has no hobbies, no free time, no moments of relaxation. He is a hard-sell salesman for education on every occasion and with every person he meets.

He lots down the hard driving barrier only with children, and particularly his grandchildren. With them he is a gentle, warm, considerate, interested man. Children find the weak spot in the armor that surrounds this lonely executive, who makes decisions every day whose consequence would frighten the most valiant. — DAVID HEFFERNAN

Advanced ideas that one assumes can be found only in the privileged smaller school districts are more numerous in Chicago than you can count on your fingers. These include some outstanding experimentations in team teaching, educational television, theme readers, clerical aid for teachers, teaching of foreign languages, and summer fellowships for teachers at the expense of the board of education. To supplement his *New Directions in Education*, Dr. Willis is bringing to Chicago outstanding consultants to serve with his staff on reevaluation of goals.

Understandable interruptions by telephone and messengers on matters requiring his immedate decisions punctuated our visit and prompted this first question:

How do you budget your time to accomplish so many things?

My first answer would be that it is almost impossible to budget time. But, while saying this, I have one overriding rule: Make time for the important things, and don't waste your time in useless discussion about unimportant things. Now that I have said this, I guess I'm as guilty of breaking this rule as I sometimes believe my colleagues are.

This doesn't prevent me, however, from outlining in the morning what I hope to accomplish during the day. I run over the things that I know are pressing and set some additional goals that I intend to include in the day ahead. I start this outlining the first thing in the morning when I'm seated in the car on my way to the office. I usually leave home about 7:30 in the morning.

Besides making this outline during the 20 minute carride between home and office, I often have to write notes for a luncheon speaking engagement. Here again, when you talk about budgeting time, you have to get done early the things that require thought. I find this difficult as the day goes on and I grow more weary.

Are the pressures of the superintendency greater today than when you started in Maryland?

I think I would have to say "Yes" to that question. More and more I realize that it is important for superintendents to learn not to let pressures extend themselves too far. It's not easy in the world in which we live to reorganize our time and attention to adjust to the many ways in which pressures come to us.

When I was in Maryland in the Thirties, I found time to do the things which I enjoy. I could visit classrooms and visit with teachers. I had time to spend with principals. All that had to do with the running of a school system, I could do firsthand. While it was a smaller system and we did have problems of budgets, buildings and community groups, they were nothing like they are now, even for the men back in Maryland who followed me.

Will there be a dimension in the A.A.S.A. just for the big cities?

I'm not so sure that we can separate the problems of the big cities. While there are some unique problems being identified, I am more inclined to believe that the big city and the surrounding school systems are going to solve many problems jointly. What we call today the unique problems of the city are those related to the mobility of population and the needs that arise for the education of children. But think what's happening: People are moving into cities and out of cities to the suburbs; they are moving across the country in all directions. Industrial plants are to be found in the big cities, but they, too, are dispersing and the workers are following them. Less and less are the manpower needs of agriculture. People from the rural areas are moving and creating a new type of center - the great metropolitan areas. These areas include big city superintendents and surrounding school superintendents. All of us shall have to share these problems.

What are some of the real problems faced by administrators?

It's difficult to separate the real problems from what I consider the No. 1 essential for facing them. Let me try to put it this way:

ONE-ROOM SCHOOLHOUSE, where Dr. Willis began his teaching career, still stands near Baltimore.



We have in America today a major responsibility which rests with school boards; we have the voice but more often the many voices of the community, and we have the superintendent of schools. The community interacts between the board and the superintendent. Yet, if we are to face the big issues in America, all three must be pulling in the same direction. We must be looking first of all at the program of education: What should be taught, to whom, when and under what conditions. Then, we must determine how we are going to finance this educational program so necessary to our way of life. And last, we must serve all the people so that their skills, their abilities, and their individual characteristics can be developed.

In January, I presented to the Chicago Board of Education a statement of *New Directions in Education* in which I listed as the No. 1 item the rethinking of what we teach. In the light of the explosion of knowledge and what we now know about how children learn, it seems to me that it is time to put the two together.

All phases of education keep coming back to finances, don't they?

Yes, finance means simply that the money going into education must be increased in total dollars as well as in the use of the dollar. For instance, it is unthinkable that schools of a large city with an expenditure level of \$450 per pupil should be compared in terms of outcome of money alone with a school system where the expenditure is \$1200 per pupil. Obviously, with more money you do employ many more teachers and many more instruments of various kinds for teacher use, to say nothing of bringing in temporarily outstanding talent to work with teachers in the course of the year.

What is the role of vocational education in the cities in this reexamination of goals?

In reply to this question, I was about to digress for a moment to talk about vocational education, using it as an illustration. Most of us associate vocational education with the Smith-Hughes Act and programs growing from it during the past 45 years.

This program has been and continues to be very effective in small schools, especially in the fields of agriculture and homemaking. At the present time one might assume that of the young people who finish high school in June, about one-half will go on to college and about one-half will go to work. We do not give much attention to the fact that a third part of a total group is represented by the number who do not graduate from high school.

Opportunities through vocational education, be they in business or industry, have a part in the program of education in the last two years of high school or even three years of high school for those not going on to college and should be the subject of considerable thought.

Those who speak so forcefully in opposition to vocational education must at times assume that the program pursued successfully by those who will go on to college is adequate for all. Some assume that vocational education eliminates the opportunity to get an education, when, as a matter of fact, the vocational program is supplementary.

I think the good vocational high school or good vocational program in no instance takes more than 50 per cent of the student's time and, in fact, may provide motivation for improvement in achievement in the fields of English, history, mathematics and science.



ADMINISTRATOR

who delegates,
Dr. Willis (center,
background) confers
with his associate
and assistant
superintendents. Bridge
across the Chicago
River is seen
through window.

What is your attitude toward federal aid for public schools?

With respect to federal aid, I prefer to use the word "support." I would start from the base of the tax problem in this country. I have worked in three states -Maryland, New York, and Illinois. There aren't many reasons why these states cannot adequately finance education on the present level, even if the level of state support is advanced to a higher level. But this isn't quite the point in this decade. The point in this decade is that school systems are dependent to a great extent on funds derived locally. This means a tax on property. Property represents much less of the wealth or assets in our nation today. The skills of people, their earning power, and other things represent wealth as well as the property one owns and can sell, whether it be a home or a manufacturing plant. To be more precise, in this state there is some evidence that Chicago has 32 per cent of the property wealth of the state.

The property tax is the major source of the Chicago board of education's money. If you look at the wealth in terms of excise or whatever we call the sales tax and other such revenue, Chicago has 41 or 43 per cent of the wealth of the state. This, in itself, then, means that different forms of wealth must be tapped to support education. You tap the forms of wealth by taking the property tax locally, while the sales tax is on a statewide basis, and the income tax is on a federal level (although many states use these sources of revenues). The question of support isn't just to get a larger budget from a source where it will be supplied by a check. The question is: How can schools get the money necessary to run the institution on the level it should be run with efficiency and with effectiveness, tapping the major sources of wealth as they exist today? The only way you get at the wealth that I'm speaking of is by having the funds to operate the school system originate on local, state and national levels.

However, I hasten to add that it takes only 8 cents in stamps to bring some of the dollars that gets into the treasury in Washington, D.C., back to the school district where it's going to be used — a 4 cent stamp to move it from Washington, D.C., to the state capital, and a 4 cent stamp to move it from the state capital to the school district. This can be done by using a simple measuring stick, such as the average daily attendance for the previous year.

What is your thinking about federal, regional and state controls?

This business of control which exercises people greatly always will be a problem. It is a problem here in this

city where we have schools as a unit, with district offices. I find staff members who do not understand a simple matter, disliking it when discussing the matter with other members who understand it. Now, this is more human relations than it is anything else. I think this carries on through the state level. We, in this city, for instance, take the position that as long as we meet the minimum state requirements there is nothing over and beyond that for those in the state office to do.

However, many of my assistants for years have looked to the people in the state office not only to pass on minimum requirements, but to pass judgment upon what we do over and beyond the state minimum requirements. This I do not subscribe to. This is what the community does with the ingenuity of its own staff. External controls hoisted upon a school district will like-



FROM FARM BOY to big city superintendent is the Ben Willis Story. Here, he is working on the family farm in Maryland.

ly prove to be stultifying to the people of the type who should be involved in teaching on the one hand, and administering and supervising on the other. The control that has limited development of school systems has been the lack of finance. Lack of ability to finance programs of education is a terrific control. Any school district with more than one school but with a tax rate that covers the entire district illustrates the principle of equalization.

(Cont. on Next Page)

What are your recommendations for the professionalization of the superintendency?

It is said that we need some 800 school administrators each year. Should we have 800 different institutions preparing administrators - some with one, two or three year programs beyond that of liberal arts? I think this gets at the heart of the matter. There are many who know far more about this than I do, but in any event I think it is something that our profession needs to consider very carefully. Here, locally, we are attempting to do this by moving into discussions with six or more universities with the idea that we will find some of the wisest and best of our young people, then discover the ways and means for them to extend their education and training for administrative leadership, and, at the same time, have them come back to us in a kind of internship program. We would not limit ourselves to our system here, but we would go throughout the country and find some outstanding people who are interested in school administration.



IN RECENT VISIT to Chicago, Finis E. Engleman, executive secretary of the A.A.S.A. (right), confers with his new "prexy."

The individual who spends a year in college after receiving a master's degree (the first of two years for the doctorate) can be better served, I believe, in many instances, by working with a good principal, a good director, or a person who is operating in a magnificent way in some school system throughout this country.

What is most needed today in a new public school building?

I would say classroom: that make it possible for a teacher and his pupils to operate on a maximum level. This means, I think, more space in order that the teacher may have important equipment ready at hand and ready for use. I think we have reached the point where it is not economical to have an equipment room in a building or even have a storage room for equipment. It's necessary that some things be available in the room. This means that a classroom of 660 sq. ft. is not as desirable as one of 720 sq. ft., nor is a classroom of 720 sq. ft. as desirable as one of 840 sq. ft.

I think we should recognize that in a school the children are there as pupils, and the teachers are working there as scholars. This means that the school is more than just a place for the teacher to hang his hat and coat in the classroom and a place to stand up and drink a cup of coffee, assuming there is a place to hook in a hotplate. I think we should provide work facilities for teachers, and not merely a place where they can sit in a reasonably comfortable chair. Next, there is the question of the administrative functions of a school, which are closely allied with knowing the children's needs from the point of health and physical fitness. This means an opportunity to test eyes, test hearing, and test several other things. Probably next in terms of space needed would be arrangements to ensure flexibility in the size of rooms - rooms where one teacher might on occasion handle three or four groups of pupils and the other teachers might be doing something that would be either helpful to this teacher or more profitable in terms of

What, in your opinion, is the significance of team teaching?

Team teaching to me is a group of six kindergarten or second or first grade teachers working together, utilizing the strength of each for the benefit of all in this particular grade. We are installing in one school a classroom where a television camera will pick up the work of the teacher and the children to be observed and listened to in other rooms on the same grade level. This doesn't mean that all the skills and abilities always will be found in one teacher. They'll be found in each of the six.

what they would do later on.

What is your philosophy and plan of administrative decentralization?

It seems to me that one of the important concerns in this country is to consolidate the small districts, to find a way to save the strength that comes from bigness in the very large districts, and yet to decentralize to the point that the school is literally a unit in itself with its community. In our case we keep close to 25,000 children as a unit, with a district superintendent operating therein with the necessary help and assistance.

I think Chicago as a school system will improve to the degree that we can push forward in our decentralization program. Eventually, the main office will be made up of those who service the schools and district offices, and not made up of those who are trying to answer all the questions. This is somewhat akin to what one might say about federal control or state control. It's the same thing! I believe we are quite consistent in this point of view.

WAREHOUSING can be wasteful!

GORDON G. CASWELL

I S YOUR school district planning to institute a central warehousing operation? If so, this word of caution may be in order: There is evidence that your expenditure of funds for major storage facilities may be a poor investment.

The "evidence" represents findings from a study of public school warehousing recently completed by the author at Arizona State University, Tempe. One conclusion from the investigation was this:

Quoted prices on large orders delivered to various schools of a district by selected school supply equipment firms usually result in a price increase to the school that is only about one-fourth the cost of storage in and delivery from a school district's own warehouse.

It is true that this finding, along with another half dozen similar ones, is that of a survey covering only eight Arizona school districts. Yet, it is likely that this same pattern will hold true for other school systems of this state and of the nation. The evaluation devices developed for and used in this investigation was approved and sponsored by the Arizona School Business Officials Association. It was worked out with the assistance of professors of school administration and professors of business administration, and checked with representatives of industry.

Two other findings of the Arizona study are applicable here:

1. In both commercial and school district warehousing operations, an increase in the volume warehoused results in an increase in the per dollar cost.

2. The per dollar cost of warehousing school supplies in a school district central warehouse is uniformly much greater than the cost of commercial warehousing of the same supplies. The disparity in cost is more than double in some instances, and more than three or four times in others.

There has been a deplorable lack of responsible research relative to the storage and distribution costs of school supplies — and a lack of concern as well. While administrators have examined minutely selected school business practices, those connected with school warehouse management have not been among them.

No current studies are known to be under way. The only investigation reported during the last 40 years on the specific subject of storage and distribution of school supplies was that sponsored by the National Association of Public School Business Officials (now the Association of School Business Officials of the United States and Canada) in 1937-38. The committee surveyed those 318 cities in the United States which then had a population of from 15,000 to 30,000.

Published results indicated that the researchers could not venture any conclusions relative to costs because of the inadequate records of the school districts studied. In fact, the committee specifically recommended that school officials be urged to provide for more adequate cost accounting records on the storage and distribution of school supplies.

Today, more than two decades after the last consequential study of this field of school operation was made, one hears little about school supply management except opinions. Many districts still expend thousands of dollars of tax revenues for elaborate central storage facilities because of "the money we will save." School supply purchasing agents still report proudly that they have saved 2 cents

GORDON G. CASWELL . . . with Scottsdale Arcadia High School, Scottsdale, Ariz., . . . formerly superintendent, Kalkaska, Mich., . . . for-



merly superintendent, Alba, Mich., . . . fermerly principal, North Muskegon (Mich.) High School . . former principal, Stockbridge (Mich.) High School.

FIVE ACCUSATIONS

These are some of the accusations that could be made against school warehousing operations of the nation's schools if the Arizona findings described in the accompanying article are typical:

1. Thousands of dollars of tax revenues are being spent on central storage facilities in the false belief that "money is being saved."

2. It isn't true that the more supplies warehoused the less the warehousing costs.

3. The per dollar cost of warehousing school supplies in a school district's central warehouse is consistently much greater than that of comparable commercial storage.

4. Commercial suppliers can deliver orders directly to schools for one-fourth the cost to the school district of storing and redistributing.

5. Schoolmen don't know whether they are losing or earning money on warehousing because accounting records in this area are inadequate. Much of the cost of school warehousing is "hidden" in other accounting segments.

TABLE 1. SUPPLY EXPENDITURES, SUPPLIES WAREHOUSED, AND PER CENT OF SUPPLY EXPENDITURES WAREHOUSED IN SELECTED ARIZONA SCHOOL DISTRICTS

School District	Supply Expenditures	Supplies Warehoused	Per Cent of Supply Expenditures Warehoused		
A*	\$455,253.97	\$182,570.84	40.1		
B	642,889.37	283,105.11	44.0		
C	174,617.36	147,241.77	84.3		
D	187,954.56	106,612.00	56.7		
E	136,289.17	98,416.65	72.2		
F	96,592.40	25,863.67	26.8		
G	84,750.57	54,700.00	64.5		
H	48,524.65	13,824.23	28.5		

^{*} Table 1 is read thus: In School District A, of the total supply expenditures of \$455,253.97, a total of \$182,570.84 was warehoused, which amounted to 40.1 per cent of the supply expenditures.

TABLE 2. DISTRIBUTION OF TOTAL WAREHOUSE COSTS IN SELECTED ARIZONA SCHOOL DISTRICTS

School District	Building and Grounds	Receiving and Storing	Accounting	Distribution	Personnel	Misc.	Total
A* .	.\$4,266.00	\$116.75	.\$240.25	.\$2,786.00	.\$52,187.00\$	350.00	\$59,946.00
B	. 3,754.54	251.75	. 436.84	. 961.98	42,830.45	254.16	48,480.72
C	. 1,180.61	266.25	. 300.37	. 1,801.26	17,060.00	400.00	21,008.49
D	. 1,562.00	120.00	. 397.00	. 1,240.00	13,698.00	300.00	17,317.00
E	. 2,362.06	110.00	. 401.95	. 493.65	4,196.66	4,069.51	11,633.83
F	. 591.20	52.00	. 134.00	. 2,230.00	6,582.61	30.00	9,619.81
G	. 9,72.00	74.00	. 51.50	. 527.00	6,176.80	150.00	7,951.30
H	. 537.50	64.38	. 42.00	. 102.41	3,209.29	90.52	4,046.10

^{*} Table 2 is read thus: In School District A, total warehouse costs of \$59,946.00 were distributed as follows: building and grounds, \$4,266; receiving and storing, \$116.75; accounting, \$240.25; distribution, \$2,786; personnel, \$52,187, and miscellaneous, \$350.

TABLE 3. WAREHOUSE COST PER DOLLAR OF SL WAREHOUSE COSTS IN SELECTED ARIZONA SCHOOL DISTRICTS

Schoo Distric	Total Warehouse Costs		Less Cost of Other Activities	Cost of Warehousing Supplies	Dollar Volume of Supplies	Cost	per Dollar Supplies shoused
A*	 \$59,946.00	!	\$35,967.60	\$23,978.40 .	 . \$182,570.84	\$.1314
В	 48,480.72		900.00	47,580.72.	 283,105.11		.1681
C	 21,008.49		1,800.00	19,208.49.	 . 147,241.77		.1305
D	 17,317.00		6,926.80	10,390.20.	 . 106,612.00		.0975
E	 11,633.83		1,163.38	10,470.45.	 . 98,416.65		.1064
F	 9,619.81		4,619.81	5,000.00.	 . 25,863.67		.1933
6	 7,951.30		397.57	7,553.73.	 . 54,700.00		.1381
H .	 4,046.10		2,023.05	2,023.05.	 . 13,824.23		.1463

^{*} Table 3 is read thus: In School District A the total warehouse costs were \$59,946, less \$35,967.60, the cost of other activities carried on in the warehouse not chargeable to warehousing supplies, leaving \$23,978.40, the cost of warehousing supplies; the dollar volume of supplies warehoused was \$182,570.84, and the warehouse cost per dollar of supplies warehoused was \$.1314.

TABLE 4. DISTRIBUTION PER DOLLAR OF TOTAL WAREHOUSE COSTS IN SELECTED ARIZONA SCHOOL DISTRICTS

School District	Building and Grounds	Receiving and Storing	Accounting	Distribution	Personnel	Misc.	Total
A*	\$.071	\$.002	\$.004	\$.046	\$.871	\$.006	\$1.00
B	077	005	009	020	884	005	1.00
C	056	013	014	086	812	019	1.00
D	090	007	023	072	791	017	1.00
E	203	009	035	043	361	349	1.00
F	061	005	014	233	684	003	1.00
G	122	009	006	067	777	019	1.00
H	133	016	010	025	793	023	1.00

^{*} Table 4 is read thus: In School District A for each dollar of total warehouse costs, \$.071 was charged to building and grounds; \$.002 to receiving and storing; \$.004 to accounting; \$.046 to distribution; \$.871 to personnel, and \$.006 to miscellaneous.

on each ream of paper (or 10 cents on each gross of pencils) as a result of "buying in quantity" and having the goods delivered to a central warehousing point. But such sweeping statements regarding the profitable fiscal outcomes of more or less costly storage operations are based on cost figures that at their best can be classified as nothing more than uneducated guesses.

The neglect of such an important facet of school management is surprising, particularly because opinions on this subject have been so sharply divided since the turn of the century. Admittedly this is an unfortunate situation at a time when costs in all areas are increasing.

The Arizona research made these three pertinent discoveries regarding prevailing practices:

1. Much of the cost of school district warehousing operation is "hidden" in other accounting segments of a school district's operating expense. For example, the delivery costs of school supplies frequently are charged to transportation, which also includes the cost of transporting children to and from school. Then, too, executive supervision of the warehouse and the costs of operating the administrative offices and possibly clerical work are almost always charged to general administration.

2. The distribution of total warehouse costs, as well as the distribution of warehouse costs per dollar of supplies warehoused, reveals that warehouse personnel accounts for by far the greater share of warehouse expenditures. Since most school districts do not maintain separate systems of accounting for warehouses (and certainly no school district involved in the study does), serious out-of-line overhead is rarely detected.

3. School districts that operate central warehouses rarely enjoy optimum use of such facilities; for the eight districts studied, the percentage of supply expenditures warehoused ranged from 26.8 to 84.3, with a median just a shade over 50 per cent. In other words, even those districts with warehousing facilities still arrange for the delivery of approximately one-half of their supplies to the individual schools.

Tables shown with this article summarize the more detailed statistics of the Arizona study by districts. The following paragraphs elaborate on the findings:

Table 1. This shows the supply expenditures (janitors, maintenance and teaching), supplies warehoused, and the per cent of supply expenditures warehoused for each of the eight districts. The table gives, by district, details on warehouse utilization.

Table 2. Distribution of total warehouse costs for each of the eight districts is shown here and is classified (as in the cost analysis guide used in the study) under the following categories: building and grounds, receiving and storing, accounting, distribution, personnel and miscellaneous. Areas chosen to represent the subdivisions of these categories, as well as individual items within the areas, included all the possible costs for a school district warehousing operation suggested by research in the field and the experience of the author.

An examination of Table 2 reveals two conspicuous inconsistencies in the category patterns: (1) the high cost of "distribution" for School District F relative to the volume of supplies distributed, and (2) the great divergence in "miscellaneous" costs of School District E. The contributing situations in these instances were not recognized until systematic costs analyses were made of the warehouse operations, the costs having been "hidden" in larger segments of the school operations.

A comparison of Table 1 with Table 2 shows clearly that no pattern exists corresponding to "the larger the operation, the greater the total cost." School District A actually warehouses more than \$100,000 less in (Continued on Page 122)

TABLE 5. DISTRIBUTION OF WAREHOUSE COSTS PER DOLLAR OF SUPPLIES WAREHOUSED IN SELECTED ARIZONA SCHOOL DISTRICTS

School District	Building and Grounds	Receiving and Storing	Accounting	Distribution	Personnel	Misc.	Total
A*	\$.0093	\$.0003	\$.0005	\$.0060	\$.1145	\$.0008	\$.1314
B	0129	0009	0014	0034	1486	0009	1681
C		0017	0018	0112	1060	0025	1305
D	0088	0007	0022	0070	0771	0017	
E	0216	0010	0037	0046	0384	0371	1064
F	0118	0010	0027	0450	1322	0006	1933
G	0169	0012	0008	0093	1073		1381
H	0195	0023	0015	0037	1160	0033	1463

^{*} Table 5 is read thus: In School District A for each dollar of supplies warehoused, \$.0093 in costs was charged to building and grounds; \$.0003 to receiving and storing; \$.0005 to accounting; \$.0060 to distribution; \$.1145 to personnel, and \$.0008 to miscellaneous for a total cost per dollar of supplies warehoused of \$.1314.

E VEN if construction costs for round areas in school buildings are approximately the same as for rectangular shapes, most of the respondents to April's opinion poll prefer classrooms, gymnasiums or field houses, auditoriums and cafeterias with square corners.

Participating administrators are most emphatic in their preference for the square cornered *classroom*; 66 per cent favor the traditional shape.

Rectangular classrooms are better because "most school equipment, such as shelving, tables, storage cabinets, and so on, is designed for square corners," a Wisconsinite stated. A superintendent from Michigan said: "A classroom can always make use of a corner for reading, small group study, and meetings with the teacher and individual students." This thought provoking question came from a Nebraska administrator: "How would you corner the trouble-makers if you had no corners?"

The auditorium is the area in the round that came closest to being acceptable to the respondents. "Acoustics are better, and maintenance is easier," argued an administrator from Minnesota. Also among the 38 per cent favoring round auditoriums is an Ohio superintendent. "I can see advantages in seating and lighting," he commented.

There was a plurality of 48 per cent that would keep square cornered auditoriums, however. And, for gymnasiums or field houses and cafeterias, 61 and 62 per cent respectively prefer rectangular shapes.

One of the disadvantages in round shapes in school areas, some respondents believe, is "wasted space."

"It would seem to me that valuable space, both storage and seating, is lost in round areas," commented a Pennsylvania schoolman. A Tennessee administrator believes that round areas present "a problem in arranging furniture."

"To me it seems that round rooms would be quite monotonous and hard to decorate," said a superintendent from Wisconsin. A Nebraskan agreed in part. "Painting contrasting colors on walls may be difficult." A Minnesota official thought that round areas might make expansion difficult, and another administrator from Pennsylvania suggested that they might have a "psychologically uncomforta-

Schoolmen Want To Keep Corners in School Areas; "They're Useful"

ble effect." Perhaps one such effect that he had in mind is in this declaration by a respondent from Oklahoma: "The awareness of directions — north, south, etc. — is lost in round school buildings."

Some respondents wouldn't "concede" for purposes of The NATION'S SCHOOLS' poll that the costs for round and rectangular shapes are the same. One was a Californian, who insisted: "Our experience has shown that costs are not the same. Perhaps they should be, but show a contractor an arc and he'll up his price!" Confirmed an Ohio official: "Round areas cost more," and he added, "they're not any better in use."

Though in the minority, one group of administrators believes that a main advantage of round areas in school buildings is more space for the money. Claimed a Kansan: "There is more usable space per square foot in round shapes." Round shapes are especially good for utilization of space where a single unit is involved, believes an Oregon superintendent.

Another advantage in round shapes is the ease in cleaning, asserted some respondents. "It's hard to get dirt out of square corners," reminded a Michigan educator. Also mentioned were lower maintenance costs and more even heating. A Montana schoolman believes that round gymnasiums present a potential safety factor.

A Texan, and others, maintained that a combination of round and rectangular areas is workable. "You have to consider for what purpose the particular room, hall or building is to be used," he said.

"I sincerely believe that certain classrooms should be round, others square, and still others rectangular," wrote a Wisconsin schoolman. "There is no one shape that is best for all circumstances, and maybe some rooms should be round on one end and square on the other."

From 13 to 15 per cent of the respondents had no opinion on the use of round areas in schools. Here is a typical comment from the groups.

"I have no strong feeling either way if they can be built at the same cost. Adjustability of space to maximum usability would be a determining factor. I can visualize round buildings with location of partitions within lending toward better space in all areas." (Wash.)

A New Yorker wanted to know "and where's the 'trend' except for a few isolated schools?"

OPINION POLL FINDINGS:

There is a trend today toward round areas in school buildings. If the costs of construction are approximately the same as for rectangular shapes, which of the following do you prefer?

Area	(no corners) corners No opinion
Classrooms	.19% 66% 15%
Gymnasium (or Field House)	.26%61%13%
Auditorium	.38%14%
Cafeteria	.25% 62% 13%

Based on a 4 per cent proportional sampling of 16,000 school administrators in continental United States, this survey brought a 27 per cent response.

SCHOOLHOUSE PLANNING



PROUD second grader displays a booklet, which she and her classmates prepared. It presents an accurate child's view of materials and processes used in constructing this modern elementary school. Also being displayed is a piece of ceiling tile used in construction.

A 'NEW SCHOOL' CURRICULUM

MILDRED WHITCOMB

THIS is the story of Winchell School research, a cooperative study of the new building that brought an astonishing amount of knowledge to Winchell parents and to some taxpayers in a city and county where a substantial building program is in progress. Moreover, this research project created for the school children a happy learning situation in reading, writing, spelling, arithmetic, economics, science and art.

Directing the building research project was Mildred Borton, second grade teacher. Her research staff represented a total age and experience of 200 years (27 youngsters times 7 1/3 years).

The study idea was born early in the summer of 1959. Mrs. Borton, who had taught for 22 years, learned that she would be assigned to the one-story, cluster type of school being hurried for autumn completion on a 10 acre tract on the outskirts of the city.

Mrs. Borton made numerous trips to the construction site, the purpose of each visit being scavengery. She stooped here, she surmounted barricades there, gathering up the scraps peculiar to each building trade.

On the opening day of school in September the excited children tiptoed in, evaluating in the first five minutes their new school, their new teacher, their new room, their new desks

In a corner of one classroom, the second grade children soon drifted over to a table loaded with assorted objects, Borton bait. If there were no bites, Mrs. Borton was prepared to abandon her collection and direct attention to some other topic more alluring to the children.

In the display were tag ends of plastics and composition materials, squares of mosaic and vinyl tiles, strips of aluminum and wood trim, rag felt, a hefty cement block, sawed-off sections of steel and copper pipe, broken acoustical board, and products only an expert could identify. As the second grade's collective curiosity intensified, Mrs. Borton awaited the first nibble. Suddenly a whole school of open-mouthed nibbles rose to the surface.

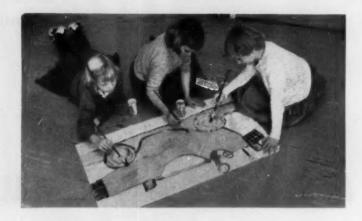
"How do you make this work, Teacher?"

"This big old brick has three holes in it. Wonder why?"

"Is this pipe ever shiny? Will it play a tune, Teacher?"

A smiling Mrs. Borton countered with a suggestion:

"Look all around your new classroom, boys and girls, and see if you can find anything that resembles one



Photos by Ward Morgan



ART TALENTS are pooled by several researchers (above), who make a poster showing one of the big machines used to build Winchell School. These artists realize, however, that "the job the machine does is im, ortant, not the size of the machine."

RESEARCHERS (left) examine, identify, study and write reports about the many materials used to make their school "the place to go." Some of these materials, as shown on the tables, are a concrete block and wall tiles.

Cover photos by Bill Engdahl, Hedrich-Blessing (left) and Ward Morgan (right).



to by Ward Morga

TO VISUALIZE the volume of a cubic yard of the good earth on the school grounds, the second graders constructed a cube 1 yard in each dimension. The cube still stands in an honored corner of the classroom. The cubic yard helped demonstrate the earth moving machine's superiority over a man with a wheelbarrow in redistributing campus earth.

or more of the objects on the table."

Ken was first. He pointed to the white squares on the ceiling and held up a matching perforated square from the table. Martha almost squealed out her discovery, as she pointed to the aluminum grid that supported the acoustical ceiling tiles and compared it with the silvery metal strip she held in her hands.

"Right you are, children," Mrs. Borton remarked warmly. "And the truth is that every object on that table came from our lovely building. Would you enjoy learning more about your new school, and how it was made? Perhaps we could find out together where these fascinating materials came from, who made them, even how much they cost. What do you say?"

Twenty-seven right arms wriggled upward in delight. From that moment the second grade was in business, the research business. Many times during the year activities would relate to this project, with regular classes in the morning and with the basic skills there acquired applied —

and, as it turned out, greatly extended - in the afternoon.

So went Monday. Tuesday was as good as a circus. Outside their class-room's long window wall a mechanical monster had maneuvered its way into the schoolyard and had already begun gnawing chunks out of a hill, the initial step in the landscaping of the grounds.

The lord and master of this earth moving equipment, Mr. Rose, was coaxed into the Grade 2 presence and became the first of a progression of resource persons who would assist in the study project.

"My machine is called a tournapull," Mr. Rose explained, with growing pride. "It can move up to 2000 cubic yards of dirt in one day. A man with a wheelbarrow, now, can't move more than 20 yards of dirt a day. You kids can soon figure that out: My tournapull out there does the work of a hundred men."

When Mr. Rose had climbed back on his tournapull, the 27 researchers took stock of his contribution. When Mrs. Borton questioned them, nobody could visualize a cubic yard of dirt or of anything else. It appeared that the immediate task would be to construct an object 1 yard wide, 1 yard long, and 1 yard high. That would be a cube, Mrs. Borton told them, and they liked the sound of the new word.

Several male researchers set off on a mission to the boiler room. There among the big pipes, identifiable to anyone in the know by the color they were painted, they found their friend Mr. Calhoun, the custodian. He loaded them with cartons and more cartons from the storeroom. Mrs. Borton produced a yardstick from wherever teachers keep yardsticks, and before the closing bell rang the classroom contained a construction measuring 1 yard in each dimension. Later, to make it look shipshape, the children, using masking tape, jacketed the cube with kraft paper, and there it sits today. On top of it for all to see rests the yellow yardstick.

Several days later Researcher Andy's mother wanted some sand for a younger sibling's sandbox. She telephoned the dealer, who explained

SERIES of large, colorful posters summarizes the year's project and contains important data from "All About Our New Winchell School," the researchers' final report.

Poster at far right shows "the 100 men with 100 wheelbarrows whose work was done by one machine."



Photo by Ward Morgan

Pupils wrote to suppliers to learn about

that sand is sold by the cubic yard. How many yards did she want? Baffled, Mrs. Nicholson said weakly: "Two, I guess."

By the time Andy came home from second grade that afternoon, the sand had been delivered. The children's sandbox was buried under a mound and the remaining sand had found its angle of rest across the driveway in front of the garage.

"Mother," Andy remarked with as much patience as a 7 year old can summon, "why didn't you ask me? I could have shown you how much a cubic yard is."

Mr. Rose of tournapull fame had boasted that his machine could do the work of 100 men with wheelbarrows. "Let's consider that a bit," the children agreed. So on successive days on dozens of sheets of drawing paper the valiant 27 painted a series of shiny black men with shiny black wheelbarrows filled with shiny black dirt.

"For Pete's sake," one of the boys said, when close to a hundred had been completed, "a hundred men with a hundred wheelbarrows would fill our whole schoolyard. There'd be no room for them to work."

Later a Bulldozer Man appeared with his massive machine, and he, too, was persuaded to come in and tell the children about his work and equipment. What a week!

The youngsters, having made the acquaintance of a diesel engined tournapull that cost \$28,000 — the price

of one of the nicest houses in the neighborhood — could now turn their attention to the schoolhouse proper. All those materials on the table, where did they come from?

At Mrs. Borton's invitation, the plant engineering director of the school system, Mr. Christensen, came to Winchell and promised to provide the second graders with a list of all the manufacturers represented in building and furnishing the school.

As a class, the children concocted a letter of inquiry. Each child picked one or more firms and adapted the basic letter to the particular product, material or service involved. Here is the letter:

"Dear Sir:

Our second grade class at Win-

Ţ

LESSON in reading is conducted by Mrs. Borton for second graders. Research project covered materials, visible or concealed, in classroom — and in whole building. Finishes and fixtures, too, were studied.



Photo by Bill Engdahl, Hedrich-Blessing

construction materials

chell School is learning about the materials that make our new school. Will you please tell us about the material you sent our school — where it came from, how it was made, how many men and machines helped make it, what it is used for, and how much it cost. Thank you for helping us.

(Signed) ----"

After a few days, the postman started bringing in the replies addressed to Donald, to John, to Joyce, or the others; 24 answers piled in. One company that didn't write sent an emissary. No less than a vice president appeared at the second grade door.

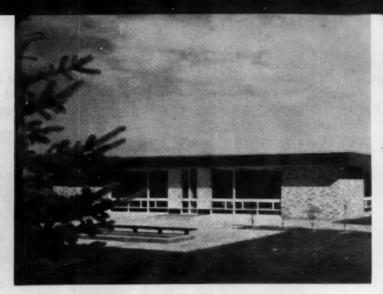
All of the correspondence that came in was specific and not too, too

difficult. Even so the processes of manufacturing put a severe strain on the reading and comprehending ability of second graders. The classroom had a dictionary or two, but these letters incited many of the children to beg for a dictionary of their own as a birthday or other gift. The little researchers toiled until they mastered many strange new words and concepts, as later it would be their job to turn the contents of these letters into original compositions.

One company secretary sent an illustrated storyletter. Another executive wrote that he had a daughter in second grade but that she certainly was not capable of composing, printing, penning and spelling correctly a letter like the one he had

UNIT consisting of multipurpose room, stage and related activities area (photo below) is used by all children in the six grades.

The stage can be used to serve the two adjacent areas or it can be closed off with folding doors so that three self-contained spaces are created for classroom use.



Photos by Bill Engdahl, Hedrich-Blessing



received. Many manufacturers sent samples.

Another real fun-day was when Mr. Bonfiglio appeared to show the class how cement is made. He brought limestone, sand and gravel. The children mixed the ingredients according to formula and put the mix into the lids of tea or coffee cans. Next day the cement had set and was very hard. However, their cement was bumpy, not beautifully smooth like the machine-made concrete of the floors and sidewalks.

The children learned that 1 yard of concrete 4 inches thick had cost \$13.50 and that the concrete in their building had cost \$18,900.

Another day an engineer visited the classroom and talked about concrete blocks, from which the school walls were built. (In many areas these blocks, left exposed and painted in striking colors, gave a delightful interior finish.) That first block Mrs. Borton had put on the table, the one



WINCHELL SCHOOL contains
12 classrooms for Grades 1 to 6,
a kindergarten, multipurpose
room, stage, related activities
area, lobby-library, and
necessary administrative space.
Each classroom has its own door
to the outside and a small paved
area and ground that can be
developed into a garden.

The children's colorful report was second grade,

but not second class!

with the three holes in it (for easier carrying, they learned), cost from 20 to 30 cents, and the 30,000 blocks used at Winchell were priced at \$8000, the engineer said.

At the home dinner table those fall and winter evenings, the families heard about how cement building blocks are cooked under steam for 24 hours to make them hard and other equally unusual gleanings from each school day or week. Indirect adult education was going on, and neighborhood interest in the school was rising remarkably.

As the year progressed, all the information gathered by the research team was being put in written report form by the individual researchers. By May 1960 these reports had been compiled, a foreword written by the principal and teacher, an index prepared, and 26 mimeographed pages assembled. John's mother had volunteered her skills and the stencils and run off the pages of the book. All

this was to appear shortly as a publication, "All About Our New Winchell School."

Each copy of the research report came out stapled into a gray soft cover with a hand-lettered title and with an original full color drawing of the schoolhouse — strictly second grade, but not second class, art. A miniature flag was affixed to the pictured flagpole, and the report was ready to be carried home and otherwise circulated.

At home the highly pleased parents read the report several times and then mailed it to the grandparents in Detroit or to Uncle John at Ann Arbor. Accompanying instructions called for its prompt and certain return.

Through this medium the parents, their relatives, and many townsfolk, particularly in the Winchell district, learned much that they didn't know about modern buildings and about one important neighborhood building. From Mary Overbey's account they

had a review of the processing of steel; from Mary Smith's, they learned about the manufacture of glass; from Rodney Dykehouse's, about skydomes; from John Weimeister's, about the fiber-glass ceiling board; from Margaret Bode's, about the flagpole and the gold leaf covering the copper ball that surmounted it.

In "All About Our New Winchell School" every material that went into the making of a highly modern school-house was described — simply but intelligibly.

While the project was under way, the children drew a wall map of the United States and dotted on it the cities or areas from which each material came — fir plywood from Oregon, tackboards from New Jersey and Grand Rapids, steel from Chicago, and — out in the margins — white pine trim from Canada, and ceramic mosaic tile from Italy.

Regarding the ceramic mosaic tile





LOBBY-LIBRARY is located at the end of a corridor for effective utilization of otherwise unused space in

the school. The square foot cost of the new building was \$14.29. Total building cost amounted to \$590,599.

the children's research report reads: "It costs \$2.50 for 1 square foot and comes in sheets 1 foot square. It is very pretty and is easy to wash and clean. It pays for itself because this tile costs about as much as it would cost to paint the walls three times." So much from Researcher James Zupke, who may reason the same way in later years in regard to his own kitchen or bathroom.

When the 7 year old research workers began adding up the persons involved in supplying the materials for their school, they were astonished to reach an estimate of 15,000. (That's higher mathematics for the second grade.) And they further estimated that 100 local men were on the construction job and named and wrote down each type of tradesman — steel workers, brick masons, carpenters, lathers, roofers, glazers, 20 kinds in all.

Perkins & Will, architects-engineers, made the class a present of a

blueprint. The associated architects in Kalamazoo — Stapert, Pratt, Bulthuis, Spray and Crothers — supplied the children with the square foot cost of the building, \$14.29.

"How much is a square foot?" Out came the 12 inch rulers, and in jig time a piece of red paper, a foot square, was posted on the tackboard.

Fifth Graders Compute Costs

In another part of the building the fifth graders, spurred on by the second grade researchers, decided to get into the act in some way. They measured their fifth grade classroom and computed the square foot cost of the room. After that they appreciated their classroom the more and took even better care of it. In fact, pupils in the whole beautiful school give Custodian Calhoun very few house-keeping chores to complain about.

As the second grade continued its own calculations, the youngsters one day were inspired to inquire where all the money had come from -\$590,599 for the building and \$24,-275 for the site, listed as "10 acres big."

At this point the term "school board" began to assume animate forms. As the names of board members were obtained and listed for the project report, the realization came that these board members were actually fathers and mothers and that one father could be claimed by the fourth grade. The school board as "owner" of the building, representing all the citizens of Kalamazoo, and their parents as "taxpayers" were new concepts.

Bob's father, a lawyer, volunteered to come to school and explain to the research staff how our system of taxation operates. To avoid the embarrassment of being stumped by his own son's peers, he went first to the tax commission for data. That day the children had their first lesson in public school finance.

The school system and their own school, the children now discovered, had an administrative staff, with Supt. Thomas R. Bowman at the top. They learned the names and functions of each person on the board of education staff and listed them in their report under "Our School Helpers." Mr. Calhoun, their own genial custodian, came high on the Winchell staff list — right after their principal and Mrs. Borton and the music teacher.

Winchell (as do other Kalamazoo elementary schools) invites the parents in for an evening early in the school year. The teacher briefs each child's parents on her plans for the year. This makes for home understanding and cooperation, and often parents volunteer their services for some part of the year's program.

Big Surprise, Parents!

By this means the fathers and mothers of the little researchers had been vaguely prepared for the building study project, but not for the staggering and adult proportions it had assumed and for its effect upon their own appreciation of the district's, the city's, and the nation's needs and progress in school plant construction. From their own youngsters they began to realize the absorbing progress that has been made by school administrators, school architects, and school manufacturers in creating a suitable work environment for the educational process.

On Dec. 15, 1959, the parents had a fine chance to ride in on their children's sweater-tails. Events leading up to that proud day were as follows:

One morning a representative of a school furniture manufacturer strode into the second grade classroom to issue in person an invitation for the class to visit its equipment division plant in Kalamazoo. All the desks and tables in Winchell School had been made by this company, and the invitation to a guided tour of the manufacturing plant was this company's response to the children's letter asking information.

Naturally for a school journey the parents' permission was essential. They not only gave permission but asked permission: Could they tag along? Almost all the mothers went on the trip, and several fathers took the morning off from work to go, too.

Preparations for a trip like that take time. First, the children had to determine exactly what they wished to see at the plant. When these objectives had been listed, they had to agree on the proper etiquette for such a visit. They worked out rules of conduct and listed them in an appropriate decalogue.

They 'See' To Learn

Once in the factory, the children watched the making of a desk and chair and a table. One child's report of the trip mentions: "People were operating machines to help with the forming, lamination, finishing, assembling, experimenting, testing and shipping. It takes one hour to make a desk, chair or table. In one day this plant turns out 7000 pieces of furniture. One desk and chair costs \$28; one table made at the factory costs from \$30 to \$50."

Mildred Borton and Theral T. Herrick, director of instruction and guidance, have developed a filmstrip telling this whole story in living color so that others too may share this adventure in learning.

In conclusion, four summings-up of this building study project will be quoted from: one by the superintendent of schools, one jointly by Teacher Borton and Principal Klosterman, one by the children in their own published findings, and one by an alumna, now in third grade.

Superintendent Lauds It

Said the superintendent of schools: "The vision and creativity of this learning project is a real tribute to Mrs. Borton and the many others who helped her. It has been truly said that good public relations begin in the classroom and are based on understanding, and this learning activity has included almost all of the desirable aspects of integrating and relating skill subjects, practical applications, and concept development."

Said the principal and the teacher: "As the children's interest grew, so did their learnings. Many people came to share their knowledge with the class. Many basic economic understandings developed as the unit progressed — the basic human activities of production, distribution, consumption and exchange of goods and services, transportation, commu-

nication, conservation, and the development of new tools and technics, as listed in the Kalamazoo social studies curriculum guide. All these were introduced to the children in a very simple way. . . .

"Living together in our second grade and studying our new school has developed an increasing awareness and appreciation of the growing interdependence of all people. Thousands of workmen from Africa, Italy, Canada, Oregon, Massachusetts, Alabama and many places in between have done their work well so that we could have a beautiful school. What we make of our new school and learn here is now up to us — children, parents, teachers, principal, custodian, administrators, and community."

'Year Went Too Fast'

The second graders in their study report put it this way: "New ideas we have learned this year are:

"We need different materials to fit different places. Steel on the floors or for doors wouldn't be good. Every material has to be put in the right place so it will be useful.

"Some machines have to be big and have a lot of horsepower. Some machines are small. We have to have all kinds of machines to do all kinds of work. The job the machine does is important, not the size of the machine. Men have to run the machines and know how to use them. . . .

"Taxes are important because they pay for our new school. Taxes are money that we pay to the government so that the government can pay people to do things for all of us. Some of the people who work for all of us and get paid with money from taxes are teachers, firemen, policemen, soldiers, sailors, marines, mailmen and inspectors.

"We need many kinds of workers. No one can do all kinds of work by himself. Without different workers we wouldn't have our new school. We wouldn't have much of anything. Every person who works does an important job that helps all of us. No worker has a more important job than any other worker. Everybody is important."

And now the last word is Anelyse Schupan's. Now in the third grade at Winchell, her summary is "five words big":

"Last year went too fast."

Courts found to be lenient, but

Parliamentary Procedure Is Best Policy at Board Meetings

LEE O. GARBER

Director, Educational Service Bureau, University of Pennsylvania

I T IS probable that only a small percentage of school boards conduct school business at meetings where parliamentary procedures in all their detail are consistently followed. This failure to follow such procedures is sometimes questioned and may be the cause of expensive delay in the performance of necessary functions.

Recently, the failure of the moderator of a school district meeting to follow parliamentary procedure was the source of litigation in New Hampshire. This was an action to restrain a school district from issuing bonds to obtain funds for the construction of a new elementary school.

On June 6, 1960, a special school district meeting was held at which approval was given for the issuance of bonds in the amount of \$95,000 to construct, equip and furnish a new elementary school. The motion on which the balloting occurred contained the same language as was used in the official document calling the meeting "except that the amount in the latter was 'a sum not to exceed \$98,000' instead of \$95,000." Before approving the motion to issue bonds in the amount of \$95,000, two other motions - one to issue bonds in the amount of \$60,000 and another to issue them in the amount of \$98,000 had been defeated. Plaintiff contended that after the initial defeat of these motions, it was illegal for the meeting to take subsequent action authorizing the issuance of bonds in the amount of \$95,000.

The court, in approving the action taken at the meeting, took the posi-

tion that action which was not in violation of a statute should not be nullified simply because it was, at most, a violation of strict parliamentary procedure. In arriving at its decision, it referred to a statute governing school district meetings which declared that the duties of the moderator should be similar to the duties of the moderator of a town meeting.

Cites Conduct of Town Meetings

In holding that parliamentary rules need not be followed strictly in conducting town meetings, the court then quoted from an early decision (Hill v. Goodwin, 56 N.H. 441) that said: "However wise or necessary such rules may be for legislative bodies, they are not adapted to the successful or prompt dispatch of business in town meetings...."

In commenting further on the subject, the court said:

"It has been the consistent practice of the courts of this state to construe liberally votes at town and school meetings without regard to technicalities or the strict rules of parliamentary procedure. . . . Irregularities where the moderator failed to observe the niceties of parliamentary procedure involving no violation of statutes' . . . are not sufficient to void the action of a school district meeting. In the present dispute there is no question about official neglect of duty on the part of the moderator. . . . Likewise there is no question that no appeal was taken by any voter from the rulings of the moderator during the course of the meeting."

The following statement of the court is indicative of the rule as applied in New Hampshire:

"Mr. Justice Holmes' reminder 'that the machinery of government would not work if it were not allowed a little play in its joints' (Bain Peanut Co. of Texas v. Pinson, 282 U.S. 499, 501, 51 S.Ct. 228, 229, 75 L.Ed. 482); has had particular application in this jurisdiction to town and school meetings."

Although this case concerns the failure of the moderator to follow strict parliamentary procedures in the conduct of a school district meeting, the court's reasoning is applicable to a similar situation where the president or chairman of a school board fails to follow parliamentary procedure in the conduct of a board meeting.

Allowance for Board Members

Courts of other states are in general agreement. They take the position that because board members are generally without experience and training in the niceties of conducting official meetings, they should not be held to a strict observance of such procedures.

It must be remembered that the rule is not without some qualifications. It is applicable only if there is no official neglect of duty on the part of the chairman, and if there is no question of the violation of statute.

Likewise, it appears, from the language used by the court, that it is only, or perhaps one should say "particularly," applicable where no question is raised by a voter at the time the chairman neglects to follow the proper procedure. Then, too, it should be noted that it is only applicable where the chairman acts fairly and gives everyone entitled to it a fair hearing.

^{*}Lamb v. Danville School Board, 162 A. (2d) 614 (N.H.).



'AFFAIRS OF STATE' are discussed by A.A.S.A. President Forrest E. Conner (left) and incoming prexy Benjamin C. Willis. Dr. Conner is superintendent of schools in St. Paul; Dr. Willis is general superintendent in Chicago.

A.A.S.A. Maps

'Education for Challenges of Tomorrow'

JAMES BETCHKAL

SAN FRANCISCO. — The attractions of this bay city (including celebrations of the Chinese New Year) competed powerfully for the attention of the more than 4000 school administrators, their wives and guests, who (despite an airline strike) came from 14 states to attend a 1961 regional convention of the American Association of School Administrators, held here February 25 to 28.

Top honors were accorded the nearly 250 commercial exhibits, efficiently housed in the new underground Brooks Hall.

Subjects and interests dissected at the general and group sessions ranged from schoolhouse planning to too much homework and from why superintendents get fired to how their wives can help them get ahead. (Editorial comments on several facets of the convention can be found in "Looking Forward," page 69.)

Presiding at four of the seven general sessions was A.A.S.A. President Forrest E. Conner, superintendent of schools in St. Paul. Benjamin C. Willis, general superintendent of Chicago schools, who is soon to succeed Dr. Conner to the association's presidency, was introduced at the first general session, while Irby Carruth,

Austin, Tex., superintendent and new president-elect, was called upon to preside over another.

Delegates heard a telegram from Philip J. Hickey, chairman of the newly created A.A.S.A. committee on federal legislation, reporting "an exciting and encouraging" meeting with President Kennedy and H.E.W. Sec. Abraham Ribicoff. Dr. Hickey, who is superintendent of schools in St. Louis, urged all school administrators to "get behind the Kennedy aid-to-education legislation"

The 1961 American Education Award was presented to William C. Menninger by the Associated Exhibitors of the N.E.A. As recipient, Dr. Menninger joins the ranks of such notables as Jane Addams, Helen Keller, Robert Millikan, and 30 other individuals who in the judgment of the Associated Exhibitors have made outstanding contributions to the broad field of education. He is the first physician thus to be honored.

Kemp Huber, president of the Associated Exhibitors, presented the award to Dr. Menninger, who was chosen as recipient because of his "inherent concern for those who need help, his deep conviction of the healing pow-

(Continued on Next Page)

er of love, his ability to inspire others and obtain effective results, and his great influence in this vital field of health and education."

In accepting the award, Dr. Menninger said that "educators are the strongest working allies of psychiatrists in strengthening the mental health of the nation."

He reminded the schoolmen that one of the "big challenges" in the educational program is "to learn how to train our emotions." A question he posed was: "How can we teach the art and the practice of getting along together?"

Another highlight of the convention was the "World of Music" program presented by the Associated Exhibitors at the final general session. School administrators were entertained by Skitch Henderson, the concert orchestra, and soloists. Myron Floren, accordion artist, performed brilliantly for the Lawrence Welk set, while dramatic soprano, Lucille Norman of "Railroad Hour" fame, delighted sophisticated squares. Making everybody happy with their antics were the Wiere Brothers.

Why Superintendents Get Fired. When a superintendent — or most anybody for that matter — gets fired, there are three principal sources of information that might make possible a reasonably accurate analysis of what happened, explained Richard B. Kennan, executive secretary to the National Commission for the Defense of Democracy Through Education, N.E.A. "We all know the sources," said Mr. Kennan; "they are the firer, the firee, and a third person, not involved, but looking on." The points of view likely to be expressed by each of these three are likely to be somewhat different, he conceded, with the third person's views probably most accurate.

From information supplied to him by "third persons" — secretaries of state education associations and state superintendents of education — Mr. Kennan determines there are five principal reasons why superintendents receive walk-

Most superintendents who lose their jobs, declared Mr. Kennan, lose them because of poor public relations.

Tact is the ingredient most urgently needed. Take the case of a superintendent who did not hesitate to tell his board members that their questions at meetings were "stupid"; or the case of a Midwest schoolman who lamented the fact that a great many people elected to high municipal office were unfriendly to the schools, yet admitted having made no effort to "sell" the schools to the public.

It's a sad thing, said Mr. Kennan. Many a hard working, sincere and competent superintendent simply does not know how to maintain good public relations. The solution he offered is twofold:

(1) There ought to be more emphasis on public relations in administration courses in the colleges; (2) more help is needed from public relations specialists in the school system itself. Word of caution: Don't "use the term "public relations" in connection with these specialists. It seems that tax cutters like to cut "public relations" people from the school payrolls before anybody else.

The second greatest reason for superintendents' losing their jobs is financial troubles. Nothing irks a community more, said Mr. Kennan, than an indication that the superintendent has allowed the schools to get into financial trouble. "And it's not enough to be right," cautioned Mr. Kennan, "the superintendent must be able to convince the public that he is right." Again, at least part of the solution lies in more training in finance in the superintendent's professional preparation. Mr. Kennan believes.

Poor relations between superintendent and board is the third most common reason that superintendents get fired. Mr. Kennan's advice: As a long-term policy, if the superintendent cannot get along with his board, he must get out. However, cautioned the speaker, there are times — and the decisions regarding these times must be made by the superintendent himself — when it is his ethical responsibility to take a stand on an important issue so the lines are clearly drawn for the public.

The remaining two principal reasons: (1) Superintendents are sometimes victims of pressure groups and thus lose their jobs, and (2) often they are fired ultimately because of poor staff relations.

As Little Children. Twelve-year old Robert recently wrote a note to Helen Heffernan, chief of the Bureau of Elementary Education of the California State Department of Education. This is what he wrote: "Can't you make them cut down on all this homework?"

Miss Heffernan took Robert's plea to the top. She asked administrators to do something about cutting out some of this homework. "Robert was merely echoing the cry of thousands of children," she said, "in resisting the pressures that are denying them their rights to childhood."

Emily, Miss Heffernan explained, played the flute beautifully, but by the time Emily reached Grade 10, the pressure was on. Emily, it seems, settled down with her books as soon as she arrived home from school. And she stayed with them until dinner time. She returned to them immediately after dinner and didn't leave them until her par-

ents insisted she retire at ten. The flute lay neglected until one day Emily said (she said it wistfully according to Miss Heffernan): "I'll just have to give up the flute. Maybe next year —" 'Emily had made her grim decision in terms of infexible adult demands, Miss Heffernan said.

"Isn't it unrealistic to insist that a child work a 50 or 60 hour week while parents and other adults object to putting in more than 40 hours?" asked Miss Heffernan, who reminded her audience that "it takes courage to hold the line for the right of children to be children."

Firing Line. "A proud and lively career is what school administration ought to be," said Angelo Giaudrone, Tacoma, Wash., superintendent of schools, to administrators who listened to him speak on "quality programs for the school administrator on the firing line."

Paraphrasing President Kennedy's 1961 State of the Union message, which he termed a "vigorous expression of encouragement to public service," Dr. Giaudrone said that school administrators must be willing to examine their practices; must be willing to recognize that the "tremendous cultural and scientific advances" that are taking place will have their effect on education; must be willing to admit that education today is something less than perfect.

The message, Dr. Giaudrone said, is "loud and clear." He advised administrators to launch themselves into the "marvelous orbit of unexplored areas of learning; to saturate themselves with data; to pass new technics on to each other, and to become deeply involved in new programs led by the great minds of our century."

Otherwise, Dr. Giaudrone warned, the "comfortable stability we have enjoyed so long may turn into a paralysis that will be the great deterrent to our nation's well-being."

Ye Olde Creativity. Aldous Huxley's question, "What are people for," was posed again and answered with "people are for progress" by J. A. Holmes, professor of educational psychology at the University of California, Berkeley.

"Progress," he said, "demands creativity. It is therefore incumbent upon the schools to foster creativity in the nation's children." He then proceeded to analyze the creative process. The most important elements, he said, are the creator's interpretation of what he sees, hears and feels around him. Dr. Holmes offered a "new theory" of creativity, based upon recent research. Children, he said, should categorize information obtained from outside sources, according

to the traditional boundaries of knowledge, in separate systems of cell-assemblies in the brain. "When a problem arises," explained Dr. Holmes, "an electro-chemical bias is set up that alerts both the cell-assemblies likely to contain information pertinent to the solution and the scanning mechanism of the mobilizer. The scanner systematically sifts and discards 'bits' of information in this and related fields, until an acceptable solution is reached."

The role of the school, as Dr. Holmes sees it, is to develop the scope and sequence of curricular experiences in such a way that the child is not "overwhelmed by an unbroken sequence of either successes or failures." He said that learning in school how to meet failure is as, or more, important than achieving only successes. "Man must learn to succeed without losing his head, and how to fail without losing his faith."

Using What We Know. Administrators attended one section meeting and subjected themselves to almost unbearable acoustical conditions to discuss better ways to make use of what is known about the learning process. They left with this certainty: Not very much is known about "the learning process," and there seemingly are acres of room for improving use of present knowledge.

"All too little attention has been given to describing teacher behavior, and far too much attention has been placed upon the organization in which the teacher performs," complained Kenneth C. Farrer. (He is assistant superintendent in charge of instruction with the Granite School District in Salt Lake City.) The teacher who would make best use of this precious learning process must be, according to Dr. Farrer, "an agent of interaction, a stimulator of thinking, a designer of applicable content, a scholar helping the learner to make reliable decisions." His message of hope: Progress will be made as teachers and administrators "become more expert in seeing children as individuals and in helping children to think clearly."

A systematic and purposeful junking of the egg-crate organization of our schools was advocated by L. D. Haskew, dean of the college of education and vice president of the University of Texas. In an address that generated much audience and panel discussion, Dr. Haskew made three suggestions: (1) Administrators ought to organize the school system to conduct a "process" rather than to "tend a set of discrete experience-boxes." (2) Administrators must look for ways to foster more variation in learning. ("The process involved in learning to read English by a six-year old from a Spanish speaking home is sharply different from that involved in teaching reading to the son of a college professor of American literature.") (3) Administrators will have to become more "thorough students than we are today of the logistics of learning.'

Dr. Haskew damned in prose those who would organize learning along the lines of bells and clocks, equal-area cells, and perfect charts. Instead, he insisted, administrators ought to be guided by the knowledge that learning proceeds as a "swirling, eddying current from some

antecedents to some consequences; that relatively little of it can be pulled apart from the main stream without the entire process suffering thereby."

The third and final presentation was by John M. Rowlett, architect with Caudill, Rowlett, Scott and Associates, Houston. He reiterated that the architect must be a working partner with the administrator.

No Plans. Schoolhouse planners who "violate fundamental principles of teaching and learning" were taken to task by Arnold Tjomsland, associate professor of education, finance and school buildings, Washington State University. He said that if excellence in education is to be achieved, much more space in the ordinary school plant must be assigned for small discussion groups (10 to 12 in number, he said) and a far greater proportion of the plant must be allocated that "encourages and facilitates individual study."

He complained that school designers are overlooking the factor of "incidental learning." While not much is known about it, it does take place, he said. An example Dr. Tjomsland presented: "Murals on walls of school buildings showing significant events that have taken place in the growth of our country have much to offer."

Another word of warning: "Patterning schools along the ideas expressed or suggested by an efficiency expert does not necessarily make for better learning."

Facts of Society. The "greatest overall failure" of the Educational Policies Commission during the 20 years when James Bryant Conant was a member was

SPEAKER-ANALYST teams were a feature of the general sessions. Here Analyst Keith Goldhammer (left), director of the bureau of educational research, school of education, University of Oregon, chats with Economist Theodore J. Kreps of Stanford University. Mr. Goldhammer "dissected" Professor Kreps paper describing major "break-throughs in business economics."

All photos by John Haskett & Associates, San Francisco



FOREIGN EDUCATORS who appeared on panel were (I. to r.): Hans Reimers, chairman, Standing Conference of Ministers of Education in West Germany; T. H. E. Chen, head, department of Asiatic studies and professor of international relations, University of Southern California; C. E. Beeby, New Zealand ambassador to France; Abdul Majid Abbass, visiting professor of Middle Eastern Studies, American University, Washington, D.C.





WINNERS of awards for distinguished service in school administration are (I. to r.): Charles M. Rogers, superintendent, Amarillo, Tex., retired; J. W. Edwards, superintendent, Portland, Ore.; Henry M. Gunn, superintendent, Palo Alto, Calif.

HOST SUPERINTENDENT Harold Spears, San Francisco, is shown expressing greetings at ceremonial opening of exhibits.



PRINCIPAL SPEAKERS at first general session are (I. to r.): F. H. Sanford, chairman, department of psychology, University of Texas; Gerald Wallace, superintendent, Corvallis, Ore.; James H. Corson, executive secretary, California Association of School Administrators; Forrest E. Conner, president of A.A.S.A.



that the commission did not set forth a policy meeting the contemporary facts of American society, said Dr. Conant who challenged administrators to hurry up and formulate such a policy. It's badly needed, he told them.

The public has not listened to pronouncements of the commission because these pronouncements, according to Dr. Conant, "have failed to discuss facts, that this is a country of wealthy suburbs, impoverished slums, isolated rural communities, and that such facts as these underlie school problems."

Dr. Conant said American opinion is divided between a small group that fears atomic war may destroy Western civilization, another small group that fears surrender to the Communist bloc may lead also to such a war, and a much larger third group that listens to these but cannot decide and simply lives on from day to day. Underlying all this, he said, is the problem of the emerging nations such as those in Africa.

He challenged school administrators "to write a document offering answers to the problems of color inside and outside the U.S., atomic annihilation, and threat of surrender to communism.

"On the basis of that," Dr. Conant said, "you then could write a social studies course for kindergarten through high school that would have meaning for the future of our society."

Threats to Curriculum. External testing programs pose threats. That much is certain, insisted Charles C. Holt. And the most serious threat, according to the director of the Joint Committee on Testing, Washington, D.C., is the influence of these testing programs on the curriculum. Most of the major testing agencies, said Dr. Holt, disclaim either the desire or the ability to influence the curriculum. He warned schoolmen not to accept the thesis of a "noted test maker" quoted by Dr. Holt as stating that "not only do these tests influence the curriculum, they should."

Self-Contained. R. Van Allen, director of curriculum coordination for the San Diego (Calif.) county schools, adjudged the self-contained classroom to be a good instructional unit in Graded 4 to 6. Byron E. Thompson, superintendent from El Monte, Calif., didn't.

The two argued it out in a debate before administrators. Mr. Van Allen insisted that at the elementary school age it is important that a child have the help of a sensitive, accepting adult at a time when he (the child) "is faced with setting his aspiration level with respect to various facets of intellectual, physical and social achievement."

Mr. Thompson rejoined that it is "unwise to expect elementary school teachers to be both competent in - and like to teach - all subjects found in the elementary curriculum." Anyhow, self-contained classrooms, he said, let too many teachers emphasize or deemphasize certain subjects depending on likes and dislikes.

Mr. Van Allen wanted to preserve the self-contained classroom because he feared what would happen to the child's "self-image" as he is "manipulated from one strange situation to another." Mr. Thompson reminded Mr. Van Allen and the audience that studies show that both teachers and children in schools with departmentalization favor it.

The argument was not settled.

Preparation for Team Teaching. Be careful when you assign teachers for team teaching, cautioned Max L. Rafferty Jr., superintendent, Needles, Calif. The teachers assigned must be able to work together congenially. "Too often," he said, "the best classroom instructors react violently to any suggestion that they assume a position even technically inferior to a 'master teacher.'" He confessed, too, that a good many teachers even generate a few sparks when asked to work closely with other teachers whose technics differ from their own.

Another precaution before plunging into a program of team teaching: Take a good look at the school plant. How many rooms are there that can accommodate 150, 100, 75 or even 50 students?

Team teaching, submitted Dr. Rafferty, leads inevitably to departmentalization. He made it clear that he was not mediating differences between Messrs. Conant, Trump and Stoddard advocating departmentalization, and the defenders of the several "block-time" variations of the core curriculum.

What's important, said Dr. Rafferty, is that administrators take the new explosion in knowledge and organize it so that it "can be taught with a minimum of twaddle and hokum."

Regional Curriculum Centers. Vigorously debated was a proposal that five to seven "regional centers" be established in this country to study the curriculum and to make available outlines, guides and instructional materials.

Defending the proposal was Herold

C. Hunt, Eliot professor of education at Harvard University. The centers, he said, would operate on an advisory basis only, with jurisdiction remaining with states and school districts.

Opposing the idea and labeling it "disastrous" was Henry M. Gunn, superintendent of schools in Palo Alto, Calif. Supt. Gunn insisted that public opinion is opposed to "a super group

telling us what to do."

Dr. Hunt maintained that the quality of local education has become a national problem partly because of the great mobility of the U.S. population and partly because of the inability of some areas to obtain sufficient competent personnel. The regional centers, he proposed, would "eliminate waste and duplication, local and state pressures, and inadequate standards."

Supt. Gunn rejoined: "The genius of the American society is to involve as many people as possible in educational

control on the local level."

Basic Questions With Basic Answers. That the modern American is becoming 'engulfed in anonymity" was one of the lamentations of Martin Essex, superintendent of schools in Akron, Ohio, and immediate past president of A.A.S.A.

We hear proposals to mechanize our classrooms, teach electronically, and standardize the curriculum," he said. "What better way, one might ask, to prepare unfortunate youngsters for a life of awesome anonymity?" Supt. Essex said that it must be the individual teacher working with the individual learner who will "continue to find solutions to the problems of individual fulfillment in the

The Ohio schoolman spoke out sharply at those who would "bridge and emasculate the strict independence and integrity" of private and church-supported institutions. "Of great concern to thinking Americans," he said, "is the Heald Committee Report in New York. Here public moneys would become a source of support to private institutions."

In his own state of Ohio, said Supt. Essex, a study commission on education beyond high school has recommended that school districts be permitted to coutract with private institutions to serve

the junior college function.

"Beyond the immediate implications of these actions," Dr. Essex said, "the dangers are obvious. If in New York State, the fountainhead of influence and publicity in our country, it becomes public policy to support private schools at Grade 13 or beyond, it is an easy step to go the whole way to kindergarten.

He told his audience that these are times that demand "incisive logic and reasoned decision."

Good Questions, "When we observe Communist education, which is so specifically designed to produce the mental outlook, the production of skills and the emotional loyalties demanded by the Communist ideology, we may well be challenged to examine our own program and ask whether our education serves our democracy as well as the way Communist education serves communism." The speaker was Theodore H. E. Chen, head of the department of Asiatic studies and professor of international relations at the University of Southern California.

Dr. Chen said that education in Red China is deliberately used as an instrument for building a proletarian-socialist society. It is "synonymous with indoctrination and propaganda," he said. Its central aim is to produce persons with the Marxist outlook, equipped with production skills, willing to accept the leadership of the Communist party, and always ready to serve the party and the state.

He described the entire population of mainland China as being included in a vast program of education. "There are numerous kinds of part-time schools, spare-time schools, short-term institutes. and special classes designed to produce immediate results." Illiteracy is being reduced, Dr. Chen reported; many millions of people are learning to read and write.

He warned administrators that too many people oppose communism without taking the trouble to find out what it is and what really is wrong with it. Administrators, he said, must be intelligent in combating communism. "We_ must take time to study Communist education, to know how the Communists are trying to mold the thinking and attitudes of the people, and what success or failures they have met. With such knowledge, we should be able to evaluate more accurately the enemy we face," he said.

On Advancing the Profession. Outlining some of the tasks that lie ahead for the A.A.S.A. Committee for the Advancement of School Administration, Forrest E. Conner, superintendent of schools in St. Paul and A.A.S.A. president, called upon the committee to continue its efforts to bring administrators and professors closer together in cooperatively developing high quality programs for future school administrators. There must be agreement as to the "body of knowledge" for school administration, considering all of the "recent additions from the fields of the behavioral and social sciences," Dr. Conner said.

Recruitment is another acute problem facing the committee and the profession, according to Dr. Conner. "We have obtained many good people through our process of self-recruitment," he said, "but we also have acquired altogether too many whose prime qualification was their availability." He hopes that the profession can find ways to encourage the acceptance of the concept that "if any significant advance is to be forthcoming in the identification, selection and training of school administrators, this must be a shared responsibility — shared between the college and school district."

Dr. Conner repeated the oft-heard plea for a professional code of ethics. "Here the record of our profession is a sorry one," he said. The goals of the profession ought to be translated into "lay language so the public has a better concept of what is needed to improve school administration in America."

Applying New Knowledge. The "Speaker" half of the first "Speaker-Analyst" team to be featured on the program, F. H. Sanford, in his own words "tried to get away with" defining mental health as a social movement "concerned with the application of scientific knowledge of human behavior to problems of human welfare." In a scholarly discussion, Dr. Sanford, chairman of the department of psychology, University of Texas, advised school administrators to apply more of this knowledge to the student who is "no bother to anyone but may be functioning at much less than his optimal level." He chided the schoolmen for devoting too much time to the "squeaky wheels": problem students, slow learners and so forth.

To Ralph W. Tyler, director of the Center for Advanced Study in the Behavioral Sciences, Stanford, Calif., went the job of "analyst." Mr. Tyler's advice to school people: Move cautiously; apply the newly found knowledge intelligently.

Decisions, Decisions. John M. Foskett told administrators that local control of education can be preserved as long as administrators are able to make decisions.

But the professor of sociology at the University of Oregon cautioned that "all too often educators are expected to make decisions without having an opportunity to identify the problem and to obtain the requisite data."

He said he is afraid that the general defensive position taken by school administrators and school boards "has resulted in an unwillingness to get problems out in the open." Sound decisions and correct solutions will result, said Professor Foskett, when educators "ask the right kinds of questions and examine the right kind of data."

Anthropology of Education. "Even the most fair-minded teachers," said George D. Spindler, "are highly selective of the values they communicate to students, and are equally selective of the values they screen out from what students might communicate to them."

Dr. Spindler, who is professor of anthropology and education at Stanford University, said teachers (in fact entire educational programs) frequently communicate assumptions and outlooks about human relations that are "not in agreement with their declared goals" for education.

He described the "anthropology of

PAST PRESIDENTS of A.A.S.A. (left), corralled by photographer, are (I. to r.): Martin Essex, superintendent, Akron, Ohio; C. C. Trillingham, Los Angeles County; Kenneth E. Oberholtzer, superintendent, Denver, and W. T. White, superintendent, Dallas. At far right is Worth McClure, A.A.S.A. secretary emeritus. KEMP HUBER (at right in right photo), president of the Associated Exhibitors of the N.E.A., cuts the ribbon opening exhibits to delegates. Lending assistance with the ribbon is Forrest E. Conner, A.A.S.A. president and superintendent, St. Paul.





education" as an "attempt to understand better what the teacher is doing, and of what the educational process consists, by studying the teacher as a cultural transmitter and education as a process of cultural transmission."

Business Break. Three "break-throughs in business economics" during the postwar period were outlined by Theodore J. Kreps, professor of business economics at the Stanford University Graduate School of Business. The first, that of gross national product analysis, has "changed our concepts and technics of achieving economic growth and smoothing our business fluctuations," Professor Kreps said.

He described a "serious abridgement of consumer sovereignty" as the second break-through, and he charged that this has "greatly weakened consumer demand in the competitive price making process, opened the door to target pricing, administered prices and government regulation of markets for goods and services, and [has] created a critical urgency for developing shrewd managers in our 51 million consumer house-holds."

Professor Kreps termed the third break-through as a "managerial revolution." He said this has brought about a "disturbing concentration of managerial power in relatively few hands," notably so, he said, in business, government and the military services. "It has thereby highlighted the imperative need for multiplying managerial skills and developing the social responsibility of executives not only in business, large and small, but in government at all levels, in trade unions, in political parties, in universities and schools, and throughout our society."

A Phenomenological Discipline. As Analyst L. D. Haskew, dean of the college of education and vice president of the University of Texas, understood Speaker C. Dwight Waldo, political science is a phenomenological discipline. After listening to the scholarly, more than 7000 word presentation of Dr. Waldo, who is professor of political science at the University of California, Dr. Haskew said:

"It would be the height of provincial vulgarity to convey an impression that Professor Waldo's penetrating paper derives its significance from what immediate implications it has for education. Its values are instrinsic to the disciplined pursuit of knowledge, and,

hence, exciting far beyond any narrow professional concerns."

Much of the knowledge now present in political science, said Dr. Haskew, is essential knowledge for the practitioner of school administration, and much of the inquiry now going forward under the direction of political scientists seems destined to produce understandings that will be "applicable to the conduct of the school enterprise."

A Faith To Live By. "You superintendents," said Theodore M. Greene, in a Sunday morning topic, "have a unique opportunity and responsibility to contribute to the evolving faith of the younger generation." The Alexander professor of humanities at Scripps College, Claremont, Calif., charged school administrators to foster a "faith that promotes unselfish love."

Friendly Disagreement. Teachers must promote a partnership with administrators, said a Southern teacher. She was Lottie Burr, social studies teacher from Dallas, Tex., and she spoke at a section meeting discussing a proposed study of teacher competence (the project is planned by the A.A.S.A. in cooperation

(Continued on Next Page)

AT PRESS CONFERENCE, held in A.A.S.A. press room, President Forrest E. Conner (fourth from left) and A.A.S.A. Executive Secretary Finis Engleman (at Dr. Conner's left) answer questions posed by reporters representing the Associated Press, the Wall Street Journal, and local metropolitan dailies. Questions centered around N.D.E.A. and other federal legislation and public school economies.





HEROLD C. HUNT, Eliot professor of education, Harvard University, proposed several regional curriculum study groups.



RICHARD B. KENNAN, executive secretary, N.E.A. Defense Commission, told delegates "why superintendents get fired."



ARTHUR F. COREY, executive secretary, California Teachers Association, addressed Phi Delta Kappans (see page 70).



JAMES E. RUSSELL, secretary to the Educational Policies Commission, announced a new policy statement to be released.

with the National School Boards Assoication and the N.E.A. Department of Classroom Teachers).

"Mutual trust, respect and friendship can exist only if we can learn to disagree [with administrators] without being disagreeable," declared Miss Burr She would have the administrator keep open his office door "indicating a spirit of welcome," so that teachers might "go in without knocking and go out the same way."

Shifting Sands. James E. Russell, secretary to the Educational Policies Commission, announced to A.A.S.A. members that the commission will have a new statement in final form in May or June. This will set forth "developing the rational powers of the individual as the chief aim of education."

After all, Mr. Russell said, such other goals of education as good citizenship cannot be attained by people who haven't learned how to think.

"Man," he said, "is on the edge of a

"Man," he said, "is on the edge of a break-through to a new level in human dignity, a fuller realization of the human possibility. If a century of applied thinking can do all it has, what will man do in another century? No one knows what the full human potential is. But we confidently can expect that our children will do things routinely that always were believed to be impossible. The source of this new level of power will be the ability to think."

Schools and the American Image. Schoolmen have a major responsibility in determining what the American image abroad shall be, said Ernest A. Jacobsen, research assistant with the Utah State Coordinating Council of Higher Education.

"International relations are no longer the exclusive province of the few connected with the diplomatic service," he reminded school administrators, He painted a picture of the American image abroad being less than it should be and attributed this mostly to misunderstandings that could be cleared up through education. "The educational system of our country can make a large contribution toward better understanding by developing in our people the traits essential to world-mindedness," Dr. Jacobsen said

Common Sense and Disturbed Children. We have, fortunately, passed through a period when there was a widespread belief that almost everyone should undergo psychoanalysis in order to live a satisfactory life and that everything said or done to a child might be permanently damaging to him if it was not done by a child guidance expert. Zenna L. Serrurier, principal of Ramona High School in Los Angeles, delivered these words of relief to a section meeting that discussed how to use common sense in teaching emotionally disturbed children.

It was agreed that in order to use common sense on these children, it made good sense to find out who these children are. That's where teachers come in; they must be able to identify behavior that is indicative of serious maladjustment, said Mrs. Serrurier. Then, too, schools need to develop better channels of communication with community agencies that have facilities for helping the children who need the guidance and therapy that schools are unable to give.

Psychology of Improved Learning. The trouble with teachers and administrators is that they are too preoccupied with the "housekeeping" aspects of education, and consequently have been not as concerned as they should be with learning or the development of competency, charged Henry C. Lindgren, professor of psychology at San Francisco State College.

Professor Lindgren told administrators that they are placing too much concern on the "more superficial aspects of behavior — aspects concerned with conformity, industry and obedience." He then cited studies to show that teachers tend not to like students who show creativity, ingenuity and independence in thinking.

Children must be taught to do their own thinking, said Dr. Lindgren, and this can be accomplished only by teachers who do their own thinking, just as "teaching children to learn can be accomplished only by teachers who are themselves interested in learning."

How is this double objective to be accomplished? Dr. Lindgren doesn't think it can be done in teacher preparation. ("This phase of education already is overloaded with technics.") Best bet and only hope: free discussion, problem oriented seminars "on company time — inservice training."

Homework for the Gifted. "Where They Are After 40 Years" might have been the title of the address by Helen Marshall to a section meeting audience. After studying the traits, successes and failures of the more than 1000 subjects of the Terman Study of the Gifted, begun in 1921, Dr. Marshall concluded that a certain amount of acceleration is advantageous "in most instances" for dealing with gifted children.

She called for more cooperation from the home in surrounding the child with opportunities to read, to learn, to enrich. Parents must actively set an example, declared Dr. Marshall. "Today, as much as 40 years ago, we should repeat Terman's admonition: 'Industrious habits should be inculcated.'"

The A.A.S.A. regional conventions held recently in St. Louis and Philadelphia will be reported in the May issue of The NATION'S SCHOOLS.

SAN FRANCISCO. — "There is no rule of thumb, no measure, no single index that will give a firm and correct answer as to what is the best use of space, the best type of material, or the best design in schoolhouse planning."

This was the conclusion drawn by the six-man jury which selected the plans to be included in the 1961 School Building Architectural Exhibit at the three regional A.A.S.A. conventions. On the basis of a three-day study of the 250 plans entered, jury members further concluded that there were no firm and pronounced school building trends discernible.

At the San Francisco meetings here, more than 80 school building plans were exhibited and a like number will be on display at St. Louis. For Philadelphia more than 100 plans have been selected.

Based on discussions by the six jurors following the judging, a concise critique of the plans entered was prepared by Shirley Cooper, associate secretary of the A.A.S.A. From this statement the following observations are made:

Among the distinctive features of the 250 buildings that claim attention (because they are carefully thought-through approaches to meeting particular school building problems) are these: the geodesic dome; planetariums; use of signal lights instead of bells; air conditioning; inside classrooms; more extensive use of modules in construction, and a growing awareness that schools need a general area like a commons.

Other aspects are: movable storage facilities; replacement of clerestory lighting with skylight bubbles; a move away from flat roofs; fewer separate auditoriums and more cafetoriums, library-cafeterias, and increased attention to outdoor space with more courts and less "stay-off-the-grass" decorative space.

According to the jury analysis, efforts have been made in a variety of ways to provide for flexibility in the schools. Space appears to be more fluid and less restrictive. The tunnel-like appearance of the traditional corridor has been improved.

Clusters of classrooms interspersed with open courts provide for an easy flow of traffic. Movable partitions permit ready conversion of space into larger or smaller units. Teaching spaces are provided for groups of students, varying from 10 or less to 300.

Guidance units, electronics laboratories, food laboratories, shops and student lounges serve as special features of the program. In some schools alcoves off the classrooms are being developed for conference purposes, as well as special work areas for students and teachers. Serious concern has been given to the needs of atypical children — the mental-

ly gifted, the less talented, the physically handicapped, and students with special artistic or musical talent.

The library facility is broadening and becoming more functional. Slides, recordings, films, photographs and packets of materials, together with books and informal references, are being combined into an instructional materials center. Strategically located, this unit becomes the hub of school activities. In some instances, workrooms, office spaces for members of the teaching staff, and alcoves for quiet reading are a part of the library unit.

Judging from the 250 entries there is evidence of more comprehensive educational planning as the initial step in designing new school plants. The principles of engineering are made to serve the instructional program; the program no longer has to be adapted to the facts of engineering.

In the better school plants site development has been included in the overall planning rather than just being thrown in at the end. With administrators and architects thinking in terms of total environment, landscaping and site development become an integral part of the total school plant.

The junior high school continues to be a challenging school building problem, the summary observes. Superintendents and architects are torn between trying to make the junior high school on the one hand and a sophisticated version of an elementary school on the other. In the junior high schools in this exhibit, concern is reflected for the individual in this transitory stage from an elementary pupil to a high school student, from childhood to young adulthood.

"Space and design," the critique concludes, "in and of themselves may be expensive or economical, desirable or undesirable, efficient or inefficient. The answer to the all-important question of 'What is a good school building?' lies in the over-all planning, in how space and design are used, and in how directly they are related to the local educational program."

Members of the exhibit jury included three architects, two superintendents of schools, and a college representative. They were:

Leslie N. Boney, A.I.A., Wilmington, N.C.; William M. Brish, superintendent, Washington County schools, Hagerstown, Md.; Richard D. Butterfield, A.I.A., West Hartford, Conn.; John H. Herrick, executive director of campus planning, Ohio State University, Columbus; E. W. Rushton, superintendent of schools, Roanoke, Va., and Linn Smith, A.I.A., Birmingham, Mich. — L.E.B.

Architectural Exhibit Proves There Is No Single Formula for Planning 'The School'



LEST WE FORGET

SCHOOL administrators, who are reputedly the most absent-minded of men, will welcome patent No. 2,964,370 issued to Edward J. Butler of Seekonk, Mass. Mr. Butler has invented an automatic reminding machine; it runs for months and years ahead and pops up notations from time to time of things that ought to be done. Cards are fed into this monster, and, when the preselected time arrives, a bell calls attention to that which should be done.

Imagine, if possible, the already overpituitarized office of the school superintendent under such an arrangement.

R-i-n-g! The board meets tonight to reduce the budget. Ring! The P.T.A. meets same hour to fatten same. Ring! The advisory committee is meeting, same room, same time, purpose unknown. Bong!! Mrs. Busty and supporters demand your presence at meeting tonight! Bong! Your family expects you home sometime this month. Bong! Drink your milk and take quieting pill at 12:30 today. Bong!! Bong!! Your promissory note is due at the bank!

Some of us certainly will never purchase the reminder machine. It is much more fun to forget a number of things that are bound to happen to school superintendents, machine or no.

PLAY IT COOL

NEVER sob with joy or break down with gratitude when approached by an executive secretary; play it cool!

This warning comes as a result of a study of the significant crusades that have been brought to the official attention of the superintendent of the Sugartown schools during the last six months and in which he has been asked to participate.

The listing includes only the most important national organizations (those having executive secretaries): the Pickle Packers Association, the Kegler Society, the Flying Farmers, the Moms of America (Where are the Pops?), the Match Cover Collectors, the Chihuahua Clubbers, the National Cherry Pie Bakers, the Curled Hair Manufacturers, and the

Egg Case Fillers of America. All of these groups felt that their activities would be stimulated by a little curriculum-mention or a poster in the halls of learning.

This listing, however, does not include such fun loving organizations as the Organ Pumpers Guild or the Little Theater Players, who are already well established in Sugartown and meet for practice on alternate nights in the superintendent's office.

Before contemplating the honor of a place on the board of directors, the wise school administrator should remember that there are lesser known groups who may deserve his prior loyalty. For example, the National Society of Button Collectors might have a special appeal for the administrator who sometimes believes that he is losing some of his buttons and would welcome instructions on saving them. Or the Folklore and Folkways Society, which determines so many of the peculiar actions of the board of education, might welcome him as an honorary exhibit.

In general, however, a school superintendent should beware of togetherness because he may get caught in the riptides of the community and really get ripped.

THE FILES

IN MOST schools the files cover a multitude of floor space and errors; but, like the ubiquitous executive briefcase, they seldom contain what they purport or promise. Under the letter "L," for instance, the most primitive research reveals lunches, left-overs and limiment—articles most necessary to the daily existence of a superintendent, but less than helpful in locating the letter of reprisal from Mr. L., who is insistent on an apology.

Why most school superintendents consider themselves Expert Filemasters or Accomplished Abecedarians is another question on which more research is desperately needed. Studies show that while most school superintendents are unusually competent in patching school bus tires, or shoeing horses, smudging ancient duplicators, and netting stray dogs, they are file disorganizers without peer. There is an ancient maxim to the effect that

he who does his own filing has a fool for a filer, but few school administrators seem to have heard about it.

Recommendation No. 1:

School superintendents should use their files less and their wastepaper baskets more. Important papers deposited in the trash usually may be recaptured after a sleepless night by calling the janitor at 2 a.m. to sift the ashes, whereas the same documents consigned to the office files are usually lost forever.

Recommendation No. 2:

At least every five years all files should be removed from the office under cover of darkness and dumped into the nearest fish pond, thus gaining office space for the superintendent's successor, even though the poor fish get an awful belly-ache.



What does the future hold for these important educational tools? The file of tomorrow, with its electronic bells and its atomic self-disposal system, undoubtedly will be able to lose any given document at the push of a button. However, it will never duplicate the pretty blush of confusion that suffuses the countenance of the office secretary when she is asked to produce a letter which she wisely threw away because it wasn't worth filing in the first place.

DICTIONARY-WISE

AS MASTERS of words, it is only natural that educators should extend their vocabulary from time to time. The danger is that the new words may get entangled in the popular tongue, and everybody will become "motivated" without realizing it.

The educational word of the month is "rationale." It is defined by Webster as "an explanation or exposition of the principles of some opinion, action, hypothesis, phenomenon or the like." Is everything clear, now?

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of 1961 convention of National Association of Secondary-School Principals, is shown in foreground on waterfront of Detroit River.

Photo of Dept. Report & Info. Comm., City of Detroit

N.A.S.S.P. program demonstrates ways to achieve

Better Articulation at Every Level of Education

LEO E. BUEHRING

Detroit. — Improvement in the continuity of the curriculum is essential if the transition from school to college classroom is to be a satisfying experience. There should be a constant flow of ideas about the curriculum from college to school and from school to college. Present cooperative efforts toward better articulation at all educational levels should be accelerated.

These were among the thoughts expressed about one of the subjects that recurred frequently in program discussions of the 45th annual convention of the National Association of Secondary-School Principals, which met here February 11 to 15. It was the first time the organization had returned to Detroit for an annual conclave since its founding here in 1916. The convention theme

was "Individual Competence and the National Welfare."

Emphasize the Three R's. Resolution, revolution and reaffirmation turned out to be the three R's of the meetings. In the spirit of St. Valentine's week, the more than 6200 registrants joined hands in their mutual resolve to add prestige to the key position of high school principalship. At the same time there was revolt against domination of high schools by colleges through entrance examinations, resistance to the encroachment upon the field of curriculum planning by external testing agencies, and fierce opposition to any European system or legislation that would weaken the comprehensive nature of American secondary schools. (Cont. on Next Page)



PRINCIPALS' PRINCIPALS for 1961-62 are (I. to r., seated): John M. Sexton, committeeman; Eugene S. Thomas, first vice president; James D. Logsdon, president, and Calloway Taulbee, second vice president. Standing are: Ellsworth Tompkins, executive secretary, and G. Mason Hall, Samuel M. Graves, and Robert L. Foose (newly elected), committeemen.

Redefined were certification standards, recruitment and placement policies, standards of performance and competencies. Reevaluated were the types of preservice and postservice training needed to upgrade the profession. Reaffirmed was the position that public education is a major factor in the public welfare and that it plays a major role in a democratic society dedicated to world peace.

Join in Activities. During the week of meetings the representatives of education's largest organization (about 25,000 members at the year's peak) did these things:

1. Examined minutely a "position paper" on the teaching of the social studies in the comprehensive secondary school. (This is a sequel to papers previously published by the association on the teaching of mathematics and sciences, functional modern languages, and the English language arts. It calls for required social studies courses in Grades 7 to 12, with elective courses thereafter.) Following further editing, the "paper" is to be published this fall.

Participated in 64 other discussion groups dealing with a multiplicity of problems confronting the school principal today.

3. Heard a blue-ribbon panel discuss the findings to date of a study of external testing programs. (The project is sponsored by the organization in cooperation with the American Association of School Administrators and the Council of Chief State School Officers.) It was agreed to continue the program.

4. Listened to the executive officers of more than a dozen other educational associations and governmental commissions in an effort to establish better articulation among the various groups.

 Heard acting secretary-general of NATO and other prominent speakers discuss world affairs.

6. Received pleas for a President's advisory committee on education.

Named as its new president, James
 Logsdon, superintendent of Thornton
 Township High Schools and Junior College, Harvey, Ill.; elected other officers.

8. Confirmed Kiel Auditorium, St. Louis, as the 1962 convention locale (February 24 to 28) and the following future convention cities: 1963, Pittsburgh; 1964, Chicago, and 1965, Miami Beach.

 Doubled its membership fees (to those also affiliated with state associations) from \$5 to \$10.

Takes Inventory. The past year's accomplishments of the organization were reviewed by the retiring chief executive officer, James E. Nancarrow, principal of the Upper Darby, Pa., Senior High School. He told a representative of The NATION'S SCHOOLS that during his administration every effort had been made by the association to face squarely certain burning questions and to do something about them. Aside from the coop-

erative effort on the external testing project, Mr. Nancarrow referred to the association's cooperation with four other educational organizations on research into individual differences, which led to the initial publication, "Labels and Fingerprints."

Another project, for which the groundwork was laid during the past year, is a study of the school principalship. This is to be more than a status study: It is to determine not only the present image of the principal, but also what the image should be.

Mr. Nancarrow believes that before much public support for the upgrading of the principal's position can be expected, principals themselves must set up standards of performance and realistic goals. Many principals report that their job would be made much more efficient if they had more secretarial and clerical help, but here, too, the profession must determine the standards for what constitutes adequate and realistic help, he said.

The retiring president believes that the man in the field is in the best position to help train candidates for the high school principalship.

Looks Ahead. The new N.A.S.S.P. president, James D. Logsdon, is in a unique position: He heads up the principals' organization while serving as superintendent of a district with two high schools and a junior college. Regarding the two positions, Dr. Logsdon told a representative of The NATION'S SCHOOLS:

"The school superintendency is a career. The school principalship also is a career. I have a feeling that the principal is the forgotten man in education. This situation is due to one of two factors: Either the principal is unwilling to accept responsibility for the instructional leadership, or the superintendent may be at fault. At times the superintendent of schools, surrounded with specialists, fails to delineate properly the responsibilities of these functionaries, with the result that in some cases the professional



RETIRING PRESIDENT

James E. Nancarrow (left), who presided at the opening session, paused to visit briefly with Ellsworth Tompkins, N.A.S.S.P. executive secretary (center), and Samuel M. Brownell, superintendent of schools of the host city.

staff is not sure to whom to turn for advice and leadership."

Educators agree, President Logsdon stressed, that the chief role of the principal is that of instructional leader, and N.A.S.S.P. will continue to emphasize this. But in actual practice this role is likely to be forgotten. "In my opinion," President Logsdon said, "the principal-ship should involve more than the handling of discipline and the selling of tickets."

Ever since 1959, when Dr. Logsdon attended a meeting of NATO countries in London, he has been firmly convinced that the educators of this country should do more in the way of teaching understanding and preservation of the values inherent in Western democracy. He hopes that N.A.S.S.P. can express its feeling (to federal agencies) "to the effect that American educators at our levels are in a better position to advise other countries on schools and teaching than those frequently appointed from top-level business, industry and higher education."

Defines Role. Ellsworth Tompkins, who is now in his second year as executive secretary of the association, views his job as that of an idea man. Another function of his job, he believes, is to help give his organization proper direction.

Dr. Tompkins believes that no educational organization should build a fence around itself, but that it should be in constant touch with other organizations whose educational objectives parallel those of N.A.S.S.P. "Alone we can't do as well as together; joining hands will result in firmer handshakes," he mused.

Cooperative efforts are needed, particularly on stating clearly what the goals of education should be. These goals should be clearly defined and realisticly stated as a working philosophy, the executive secretary emphasized.

Dr. Tompkins is a believer in "tapping the best judgment of the wisest people in education — leaders whose intuitions have turned out to be correct." Instead of doing status-type research or a survey of procedural literature, meetings of the American assembly-type could be held. Leaders in the field would be brought together to analyze comments based on intuitive judgment. Such formulation could result in good things for education, also at the secondary level, Secretary Tompkins predicts.

Dr. Tompkins stressed the idea that educators must not only think through what they believe regarding the goals of education, but they also must speak out on the basis of these convictions if the American people are to benefit from the philosophy in which educators believe. The approach must be positive:

for things, rather than against things. "It is not as important to clear the barriers (which probably will not be completely removed anyway) as to assess the job which professionally has to be done," he said.

Address Sessions. The speaking fare included a wealth of domestic vittles flavored with a dash of imported condiments:

Samuel M. Brownell, former U.S. Commissioner of Education and now superintendent of schools at Detroit, welcomed the principals' group. Dr. Brownell told of his experiences as chairman of the U.S. delegation to the international conference on education at

EIGHT PAST PRESIDENTS participated in the proceedings. Shown in first row are (I. to r.): Paul E. Elicker (1938-39), subsequently executive secretary until 1960; Oscar Granger (1940-41); Galan Jones (1947-48), and Joseph C. McLain (1953-54). Past presidents in second row served from 1956-60. They are, respectively (I. to r.): George L. Cleland, R. B. Norman, George Shattuck, and Cliff Robinson.



KEYNOTE SPEAKER David D. Henry (left), president of University of Illinois, consults with James D. Logsdon, new N.A.S.S.P. president.

Geneva, emphasized how certain of the statements of agreements reached were much in line with the objectives of American educational associations. He warned against pressures to overload the curriculum.

David D. Henry, president of the University of Illinois, spoke on the convention theme: "Individual Competence and the National Welfare." He said that public education is rooted in the concept that the development of the individual is central to all social and political activity; if the individual is to merit the place assigned to him, his talents and abilities must be developed to the fullest.

Expanding his theme, President Henry said there is no single place where the American people can turn for an authentic and clear appraisal of the conditions of education or a measure of what should be done to achieve national goals. A major handicap to progress in national educational affairs is the number of disparate voices on educational issues and the lack of a central means of appraisal and recommendation for education in the nation as a whole.

Speaking in favor of a President's advisory committee on education, Dr. Henry said the function of this agency should be the appraisal of the national status of education. The committee would have no administrative responsibility and, therefore, would not interfere with existing federal departments; it would not pretend to reflect the professional approach to essentially educational problems. The committee would, as does the Council on Economic Advisers and the Council of Science Advisers, speak to the President and through him to the Congress and the nation. Action programs would fall to those regularly responsible for recommending action, both within and without the government.

Alberico Casardi, acting secretarygeneral of NATO, flew from Paris to tell the schoolmen about his organization. "We in NATO rely on you and



need you to explain why NATO exists and what it stands for," Mr. Casardi declared.

Speaking of the Soviet coined phrase, "peaceful coexistence," the secretary-general said that the expression is diabolically clever and diabolically misleading. War, in Mr. Khrushchev's words, no longer is inevitable, and there is a possibility of some internal trouble in Russia. Meanwhile the duty of Americans, Mr. Casardi said, is not merely to proclaim our principles, but to be ready to live by them and to defend them. We must prove that our system is right, not only to ourselves but to others. This we can do at home, he indicated, by promoting better justice, better equality, better productivity, more efficiency - all within the framework of that basic principle of Western civilization, respect for the individual.

Edward Bennett Williams, noted trial lawyer of Washington, D.C., said educators and lawyers can make the greatest contribution toward resolving the great issues of our new era. Peace cannot be built by force, but by law, he stressed.

Mr. Williams recalled that since 1945 the International Court of Justice has been centered at The Hague, but that the 15 justices thus far have decided only 25 minuscule cases. Our country must accept responsibility for the failure of this court to function because we have failed to submit unqualifiedly to the decisions of the court. This tribunal, in keeping with original intent, might have proclaimed how the U-2 matter would have been litigated and how the Berlin situation might be adjudicated.

Mr. Khrushchev has had his hand on the thermostat for the past decade, making war either hot or cold as he chooses, and we have taken off or put back on our coats in keeping with the temperature changes, Mr. Williams indicated. It is our turn to regulate the thermal environment, he urged.

George Romney, president of American Motors Corporation, paraphrased Henry van Dyke by saying: "We must help our youths to find their glory in the present in order to make their future free. They need great meanings, objectives and convictions in their lives."

The great principles on which our nation was founded and on which the Declaration of Independence was based have universal meaning. To look upon these rights as ours alone is a fatal error, he said.

Mr. Romney explained that it took centuries for man to gain religious freedom. Our type of political freedom is only 175 years old. American economic principles have existed in their present form only 60 years. If we are to bring these benefits to peoples of other countries, we must teach them to our children first, Mr. Romney declared. He concluded: "We must have common convictions regarding the Creator as the common bridge we must use in reaching the peoples of the world and helping them. Success will come from seeking, knowing, loving and obeying God. Youth detects readily whether adults have or do not have such convictions."

James C. Worthy spoke on education in the Sixties from a businessman's point of view. Said Mr. Worthy, who is vice president of Sears, Roebuck & Company, Chicago: "I am confident that educators can hold before the American people some of the vision of what might be accomplished in this country, if all our children could have the educational opportunities now available to some. Their good judgment and good sense can be counted on to help provide not only the will but the way to that accomplishment."

Weigh Problems. College admission programs came up repeatedly for discussion by various program speakers. Characterizing the high school senior with hopes for college as "a bundle of nerves in a rat race," Lloyd S. Michael urged the schools and colleges to act together on this educational problem. The principal of Evanston Township High School, Evanston, Ill., said that cooperative efforts toward curriculum continuity should be accelerated, and pressures should be resisted that impair the school's obligation to develop programs suitable also for noncollege-bound youth.

Dr. Michael stated that colleges are exercising a steady, increasing pressure on the secondary school curriculum. He emphasized that these influences should be directed toward creating the kind of changes that will not undermine the philosophy and purposes of the comprehensive high school.

Stephen Romine presented the admission problem from the college dean's point of view. The dean of the college of education of the University of Colorado, Boulder, stressed that articulation is a major focus of failure in American education, of which the college admission program is the most obvious, but not the only, example. The struggle for the tax dollar results in pressures and counterpressures that may be resisted but cannot be escaped, Dean Romine stated. Legislative investigation and intervention, sometimes bordering on malicious meddling, harass many college administrators and professors. The power struggle in education has reached new heights, as many and varied motivated groups within and without the profession compete for the control of educational standards. College admission problems can be and will be solved only if secondary schools and higher institutions work together far more closely and cooperatively than they ever have, Dean Romine concluded.

Test Testing. External testing was another major field of exploration. Discussion of a report on conditions in this area occupied an entire evening general session. Reporting was Charles C. Holt, director of the Joint Project on Testing

of the N.A.S.S.P., A.A.S.A., and C.C.-S.S.O. The greatest danger of testing, Dr. Holt stated, was the apparent belief of parents and the public in the infallibility of tests.

In some instances colleges give several entrance tests but do not make any apparent use of the results, Director Holt reported. About 70 per cent of the administrators from all sections of the country who responded to a questionnaire sent out by his committee indicated an almost complete lack of information about the real bases for admirting students to higher institutions. There is danger also of teaching for purposes of gaining high scores on standard tests, he indicated.

Finis E. Engleman, executive secretary of the American Association of School Administrators (one of the cosponsors of the External Testing Project) said that some 24,000 years of time are used annually by all the high schools in testing. He warned against the pressure on the child and the terrific strain created by anxiety about returns from the test. "It is a frightening thing to me," Dr. Engleman declared, "to find test makers who may be able to help us evaluate what we teach, but are wholly unprepared to tell what to teach, influencing our curriculum. Outside tests tend to deemphasize inside testing by the teacher."

Edgar Fuller, executive secretary, Council of Chief State School Officers (the third sponsor), stressed the possibility of uniformity in instruction resulting from a wide use of standardized tests. Dr. Fuller said that if those in the profession will not do what they should do in exercising leadership in this field, philanthropic foundations will take over. The professionals, he indicated, should take care of the problem and decide what should be done in testing as in other fields.

Other high points of the speaking program were the following: a discussion on the twelfth grade program by Charles R. Keller, director of the John Hay Fellows Program, New York City; a report on the ungraded secondary school in Melbourne, Fla., by B. Frank Brown, principal, and a discussion of school-college cooperation and instruction as demonstrated at Taylor Allderdice High School, Pittsburgh, by Bernard J. Mc-Cormick, principal.

Stress Social Studies. Merrill F. Hartshorn told the principals: The full potential of education (beyond biological and physical sciences) can be realized only through social science research. The executive secretary of the National Council for the Social Studies, Washington, D.C., was co-chairman of the three meetings at which the validity of the social studies teaching "position paper" was explored. The other chairman was Delmas F. Miller, director, University High School, West Virginia University, Morgantown, W. Va., and chairman of the N.A.S.S.P. Committee on Curriculum Planning and Development.

Move Up Executives. Other than President Logsdon, officers and members of the executive committee who took over immediately after the convention were:

Eugene S. Thomas, principal, Central

Eugene S. Thomas, principal, Central High School, Kalamazoo, Mich., who was moved up from second vice presi-



SOCIAL STUDIES "position statement" was scrutinized at three sectional meetings, held under the direction of Delmas F. Miller (left), chairman of the association's committee on curriculum planning and development, and Merrill F. Hartshorn, executive secretary, National Council for the Social Studies.

dent to first vice president; Calloway Taulbee, director of secondary education, State Department of Education, Santa Fe., N.M., moved up from executive committeeman to second vice president; Robert L. Foose, principal, Westfield Senior High School, Westfield, N.J., was newly elected to a four-year term as committeeman. Mr. Foose is a past president of the New Jersey Association of Secondary-School Principals.

Holdover members of the executive committee are: John M. Sexton, Northeast High School, St. Petersburg, Fla.; Samuel M. Graves, Gamaliel Bradford High School, Wellesley, Mass., and G. Mason Hall, Edmonds Senior High School, Edmonds, Wash.

To help build school lunch programs

that are nutritionally and educationally sound,

Analyze New School Lunch Trends and Products

THELMA G. FLANAGAN

State Supervisor, School Lunch Program Florida State Department of Education

N BUILDING for the future, the school lunch program can be no exception to the fact that this truly is an age of creating and coping with change. The national school lunch program and "special" milk programs are now old enough and costly enough that nationwide research has been conducted to show the comparative values of the two programs, both to the health of the child and to the agricultural industry. One report1 shows that the children in "special" milk programs drank nearly onethird again as much milk while at school as children in schools not participating in the program. The "special" milk program increases the level of intake and the number of customers consuming milk.

This research also shows that where soft drinks are available at school, milk consumption is lower. It reports further that "consumption of milk away from school is also lower among children attending schools in which soft drinks are available.'

Has the time come when we should ask: Should school milk reimbursement be limited to schools that are genuinely interested in developing the milk habit as a means of maintaining and improving child health? Should schools receive school milk reimbursement from taxpayers' funds if they continue to serve soft drinks when national research shows that the sale of soft drinks retards the sale of milk? Should schools receiving federal school lunch or special milk reimbursement be required to follow the recommendations of the American Medical Association, the American Dental Association, and the National P.T.A.? They have all passed resolutions condemning the sale of carbonated beverages in schools.

Even more significant is another research report2 on the quantity and value of foods used per pupil in Type A lunch programs and in other schools. It provides some measure of the nutritional adequacy, the educational value, and the value to the agriculture industry of Type A programs as compared to other school lunch programs. For example, in Type A programs the average value of milk served per pupil is \$9.29 as compared to only \$5.40 in a la carte schools. Fruits and vegetables in Type A programs average \$3.-15 per pupil and only \$1.19 in a la carte schools.

By contrast, the value of the nonprotective foods - foods that have limited nutritional value, such as desserts and snacks - are higher in a la carte schools. For example: In a Type A program, the average spent per pupil per year is only 3 cents for pie as compared to 16 cents in a la carte schools. The total value of food used per pupil per year, national averages June 1957 to June 1958, in schools serving Type A lunches was \$28.61, as compared to only \$19.32 in the non-Type A schools.

School lunch programs fall in three general classes:

- 1. Type A lunches and "special"
- 2. A la carte food and "special"
 - 3. A la carte foods and various (Continued on Page 126)

THE SCHOOL LUNCH PROGRAM SHOULD:

- 1. Contribute to the nutritional well-being of pupils by making available a nutritionally adequate lunch that meets at least one-third of the pupils' daily nutritive requirements.
- 2. Provide a real-life situation for teaching food habits, importance of food to health, table manners, a spirit of thankfulness, cleanliness and group conduct.
- 3. Provide exploratory experiences helpful to pupils in making career choices, related to fields of quantity food service and nutrition.
- 4. Provide a bridge to project nutrition education into the home and community.
- 5. Improve school morale.

¹Milk Consumption by Children at School and at Home in Relation to the Special Milk Program, Marketing Research Report No. 408, U.S. Department of Agriculture (June) 1960.

²Market for Food in Public Schools, Market Research Report No. 377 (January) 1960.



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Interview Reveals Resignation Was Requested From Executive Director of N.S.B.A.

National interest has developed concerning the circumstances attending the resignation of the executive director of the National School Boards Association. Seeking further information for readers of The NATION'S SCHOOLS, the editor interviewed William A. Shannon, whose resignation was requested by the N.S.B.A. executive committee; Edward Tuttle, first executive secretary, and questioned Roy O. Frantz, president of

RICE. Mr. Shannon, we appreciate this opportunity to ask you some questions. Last month our readers learned that you had resigned as executive director of the National School Boards Association. The information was based upon a release from the headquarters' office quoting President Roy O. Frantz. The release stated that your resignation was taking effect almost immediately. We called the headquarters' office and talked to the acting director, asking him if he could give us the reason for your resignation. He said no reason had been stated. A number of our readers have wondered about your sudden resignation, and whether it was voluntary.

Shannon. My resignation was requested by the executive committee.

R. When did this happen?

S. At a meeting of the executive committee in Tampa, Fla., on Sunday morning, January 8. I submitted my resignation to the executive committee to be effective March 15, and I promised at that time that I would turn over the office, after completing the minutes of that meeting, to my successor by Febru-

R. What reasons were given you by the executive committee for demanding your resignation?

S. The reasons given were: (1) The state association secretaries, presidents and others had lost confidence in my leadership as executive director. (2) There had been personnel problems in the national headquarters' office under my management. (3) Relationships between the N.S.B.A. and other national organizations and foundations were unsatisfactory under my leadership.

NOT ASKED TO ANSWER CHARGES

R. Were you asked to answer these charges?

S. No! The first secret session of the executive committee was held on Friday afternoon; the second session was held on Saturday morning. I was not asked once to appear before this group to answer any charges or questions that they might like to raise. Again, I would like to point out that in the 41/2 years that I have served as executive director of N.S.B.A., neither the president of the organization nor any one of the directors nor a small committee or large committee of this group, which governs N.S.B.A., has ever asked to sit down with me and make suggestions as to ways and means of improving my work for the national association.

R. Then, Mr. Shannon, as I understand it, this request for your resignation was without previous warning or indication. How long was your contract still to continue?

S. I have never had a written contract with the board of directors of N.S.B.A. I have been employed on an annual basis, and always felt that the governing board of N.S.B.A. would treat me or any other employe in the same manner that any outstanding school board would operate with its executive officer in a local school district.

SUBJECT TO REVIEW BY BOARD

R. By whom were you originally hired, and what is the authority of the executive committee to hire and fire the executive director?

S. I was employed in 1956 at the annual meeting of N.S.B.A. in Atlantic City. The N.S.B.A. constitution provides that only the entire board of directors has the authority to employ the executive director and set his compensation. The executive committee, composed of seven of the 20 members of the N.S.B.A. board of directors, took the action requesting my resignation in Tampa in early January of this year. The N.S.B.A. constitution provides that the executive committee has full authority to operate and act for the board of directors and the association between meetings of the board of directors. However, the constitution provides that the executive committee is held accountable to the board of directors, which is composed of 20 members from 20 states.

R. Then, the action of the executive committee theoretically is subject to review at the next meeting of the board of directors.

S. That is correct.

R. When is the next business meeting of the board of directors?

S. It had been agreed that the next business meeting of the board of directors to act on the annual budget and staff employment will be held about the middle of July. (Cont. on Page 112)



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Resignation

(Continued From Page 110)

R. In previous years, Mr. Shannon, when did the question of your salary for the coming year come up for consideration? Did the executive committee act on this in previous years, or did the board?

S. The whole board of directors has always acted upon the annual salary of the executive director, at least during the last four years, and the compensation has been increased for me each of the four years that I have been reappointed to the position.

of previous years had been followed, the question of your reappointment and salary would have come before the full board?

S. Yes, at the post-convention meeting of the board of directors.

ASSOCIATION HAS GROWN

R. I think the public would be interested to know something of the growth of the organization during its years under your direction. Can you tell us something about its increase in membership and other activities?

S. In 1956, the budget of the organization was \$37,000. In 1960-61, the budget is \$185,000 from association

memberships and activities. Attendance at the annual convention of N.S.B.A. in 1956 was 1652. Four years later the attendance was more than 3500. The N.S.B.A. headquarters were moved from 450 E. Ohio Street, Chicago, in 1958, to the Northwestern University campus in Evanston to establish a national center for school board studies. The staff has increased from two of us, in 1956, to eight full-time and two part-time employes. The memberships of state and territorial associations in N.S.B.A. increased from 43, in 1956, to 52, in 1958. During the 41/2 years I have been with N.S.B.A. we have produced more than 30 brochures, pamphlets and yearbooks. Last year we published a 576 page yearbook entitled "Education for World Leadership," which was the same subject used for the annual convention in Chicago. addition to the basic association budget, approximately \$270,-000 of foundation and corporation money has been made available to the association for special studies and projects during my term of office.

WORKS WITH OTHER GROUPS

R. How does N.S.B.A. cooperate with other organizations?

S. We have had joint projects with the American Association of School Administrators on how to evaluate the schools. We have a cooperative project with the Department of Classroom Teachers, N.E.A., and the American Association of School Administrators on teacher competency. Joint projects with the Federal Civil Defense Administration and the Boy Scouts of America have been sponsored, resulting in joint publications. We have cooperated with the U.S. Office of Education, Association of School Business Officials of the United States and Canada, National Congress of Parents and Teachers, Council of Chief State School Officers, as well as with many other national, professional and lay associations.

R. Do you know personally whether the other members of the board of directors who were not at the executive committee meeting have concurred with the action of the executive committee?

S. I was told by the executive committee that all members of the board of directors had been called (except two) by telephone and had concurred in the action resulting in my dismissal. I have since talked personally with only two board members, both of whom had been reached from Tampa by telephone. One stated that he had agreed to the action of the executive committee only after he was informed that I was tired of the details of the job and wished to go back to school administration. When I told him that I had never made such a statement, he was surprised that such tactics

(Continued on Page 116)





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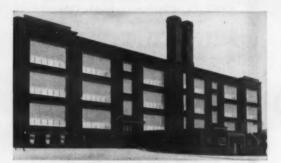
Shade Green Glass Blocks, installed in Boyceville, Wisconsin school, control severe sun conditions.

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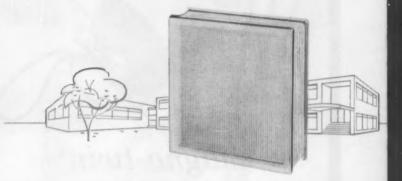




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(Continued From Page 112)

were used to get the consent of some of the members of the board of directors. I also talked to another member of the board of directors, who stated that he had not agreed to any such action and had never heard a word of criticism regarding my work with the association.

R. To sum it up, Mr. Shannon, when your resignation was requested, you had no warning or indication that it was coming, nor were you given a hearing. Also, it was an unusual procedure inasmuch as on previous occasions your reappointment and your salary were decided by the entire board of directors.

S. That is true.

N.S.B.A. PRESIDENT REPLIES

The following communication was sent to Roy O. Frantz, president of the N.S.B.A., at his home in Pueblo, Colo.

"We are interviewing William Shannon concerning his resignation as N.S.B.A. executive director. We would be pleased to receive a statement from you concerning procedures used and reasons given in requesting his resignation "

President Frantz replied: "I am enclosing copies of releases made by N.S.B.A. and Bill Shannon. I am certain my board of directors would agree with me that to release additional information would not only break faith with the understanding between Mr. Shannon and ourselves as to proper procedure; and would not contribute anything to the welfare of Mr. Shannon."

The essence of the two releases was reported in a news story in the February issue of The Nation's Schools (p. 160). The only direct quotation from President Frantz in those releases reads as follows:

"I accept Bill Shannon's resignation with regret. I am sure that all members of the N.S.B.A. are aware of the excellent job he has done. We have all benefited by his hard work and his imaginative mind. He has been the chief architect for the association's growth during these past five critical years, and we shall continue to accrue profits from his administration in the years to come."

TUTTLE EXPRESSES DISMAY

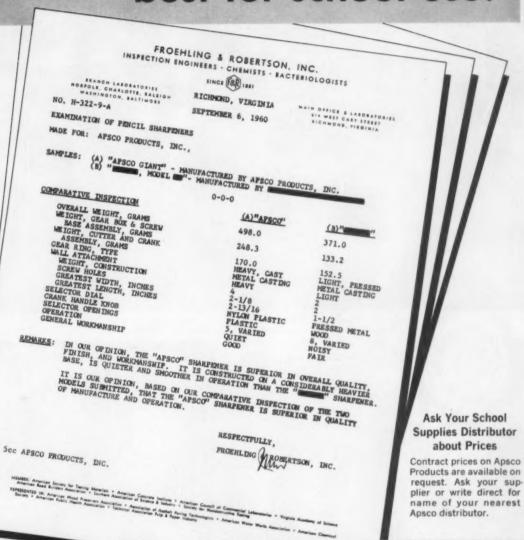
Because of his acknowledged leadership in the early days of N.S.B.A., Edward Tuttle was asked to comment.

R. As the first executive secretary of N.S.B.A., what is your reaction to this method of sudden dismissal for its executive director?

TUTTLE: My reaction was expressed in a letter to the N.S.B.A. president (with copies to all members of the board of directors), written on January 9, immediately after I learned from Bill

(Continued on Page 120)

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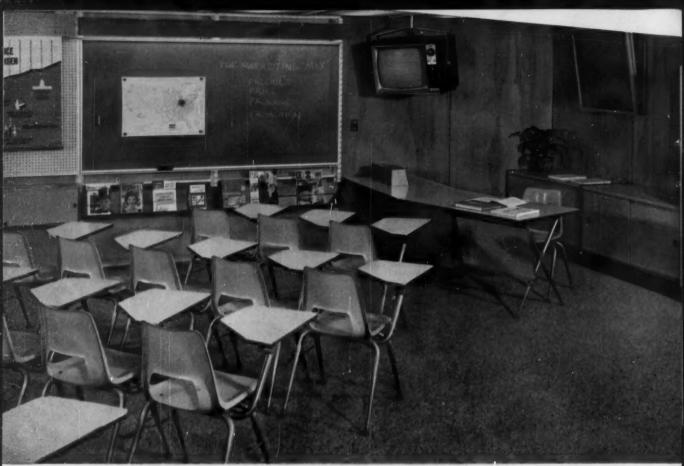


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422 East New York Street Indianapolis 2, Indiana (Continued From Page 116)
Shannon of the treatment accorded him at the meeting of the executive com-

mittee in Tampa.

In this letter I voiced complete dismay that a resignation should have been demanded of the executive director in the middle of a contract year without any preliminary warning that there was dissatisfaction with his performance of duties, or without any opportunity for him to be heard before the full board of directors in answer to the alleged charges.

I pointed out that, wholly aside from any personalities involved, such precipitate action was wrong in principle and a grievous blow to the prestige of school board leadership in this country at a time when it needs to show conduct of the highest caliber. I said it seemed well-nigh incredible to me that the directors of the national organization, which presumes to set standards for the effective and ethical conduct of boards of education at all levels, should proceed to violate those standards by its own action. Finally, I indicated that the standing and reputation of N.S.B.A. are dear to me, and I was heartsick to think that any tarnish should touch its shining

In reply to this letter, the N.S.B.A. president wrote to me on January 11 saying: "We respect your good judgment. As you say, there are always two sides to a problem, and I assure you that each member of the committee believes the decision was fair and best for all concerned. As the opportunity presents itself we shall give you the other side of the story."

No such opportunity has seemed to present itself to date, and I am still convinced that the manner in which the N.S.B.A. executive committee took this action will result in untold damage to the whole system of the control of American public education through boards of education, unless some stem corrective measures are taken by the voting delegates at the forthcoming national convention in Philadelphia.

JOINS STATE OFFICE

NOTE: On March 16, Mr. Shannon assumed the responsibilities of his new position in the Office of the Illinois Superintendent of Public Instruction. He is a consultant for school district reorganization and the curriculum.

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-STEPHEN SCHLITZER



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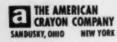


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Warehousing

(Continued From Page 80)

volume than District B, while sustaining almost \$11,500 more in total warehousing costs. Also, School District G warehouses more than double the volume of School District F at a cost almost \$2000 less.

Table 3. This shows warehouse costs per dollar of supplies warehoused. The figures are net, obtained by subtracting the "cost of activities carried on in the warehouse but not related to warehousing supplies" from "total warehouse costs." The resultant cost then was divided by the dollar volume of supplies warehoused. The range was from 19.3 cents for School District F down to 9.75 cents for School District D. The average approximated 13.9 cents and the median, 13.5 cents.

The district with the highest dollar volume of supplies warehoused (\$283,105) had a per dollar cost of supplies warehoused of 16.8 cents, and the school district with the lowest dollar volume (\$13,824) computed this at 14.6 cents.

It is significant, too, that four out of the eight school districts showed a per dollar cost of supplies warehoused that was within a fraction of a cent of the 13.9 cents average, even though the dollar volume warehoused by the same four school districts ranged from \$147,241 down to \$13.824.

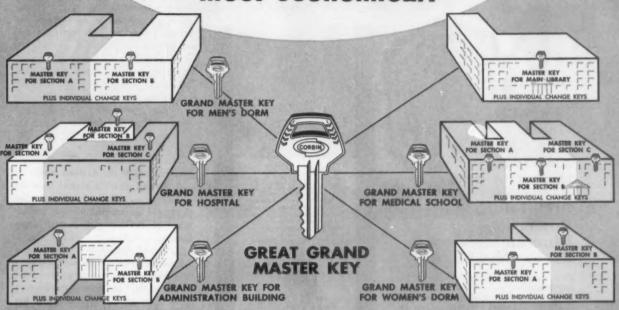
Note that School Districts H and F are small operations with a volume of approximately \$14,000 and \$26,000 a year, respectively, whereas District B handles a volume of almost \$300,000. Thus the cost per dollar of supplies warehoused for School District B actually is slightly over 2 cents more than for District H, and only about 2.5 cents less than the cost for School District F, which has the highest warehousing cost per dollar of supplies warehoused of any school district involved in this study.

School warehousing costs exceed those of commercial warehousing. This author is acquainted with a school system that asked for prices on supplies delivered to a central warehouse, and also for prices on the same group of items (approximately \$40,000) to be delivered directly to about 100 school buildings. The sale price on delivery to the 100

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(Continued From Page 122) schools was quoted by a school supply and equipment firm located 100 miles from the school system at only about 4 per cent higher than for delivery to a school central warehouse.

Another district requested quotations on orders of more than \$70,000 to be delivered to 120 different school buildings. The quotation in this instance was only 3 per cent more than when the same supplies were delivered to a central warehouse. Percentages tended to vary with the size of the order, number of school buildings, number and variety of items,

methods of delivery, and the ability of a particular school supply and equipment firm to handle large orders; but in no instance was the cost of delivery of supplies to separate school buildings anywhere near the cost of the district's own central warehousing of these supplies.

Table 4. How each dollar of total warehouse costs is allocated for each of the eight school districts studied is shown here. It is apparent that the "personnel" category accounts for the greatest part of each dollar of warehouse cost, followed by "build-

ings and grounds" and "distribution," respectively. In general, each dollar spent on central warehousing is distributed as follows: buildings and grounds, 10 cents; receiving and storing, 1 cent; accounting, 1 cent; distribution, 7 cents; personnel, 80 cents, and miscellaneous, 1 cent.

Table 5. Detailed here is how the warehouse costs for each dollar of supplies warehoused by the eight school districts are allocated among the six types of expenditures.

In general, the cost of warehousing school supplies per dollar of supplies warehoused is 13.5 cents, distributed among the six cost categories as follows: building and grounds, 1.2 cents; receiving and storing, 0.1 cent; accounting, 0.2 cents; distribution, 0.7 cents; personnel, 11.1 cents, and miscellaneous, 0.2 cents. Again, we find that personnel, building and grounds, and distribution account for most of the total cost.

Here are four recommendations growing out of the Arizona study:

 School districts should note the results from this and other studies as an aid in determining the advisability of instituting a central warehousing operation.

2. School districts now operating a central warehouse should apply a cost analysis guide, such as that used in this study, as a means of effecting more accurately and intelligently the advisability of continuing a central warehousing operation.

 Fiscal evaluation of school district warehousing operations should be made periodically along with other fiscal practices of districts.

4. State school accounting codes should be revised to clearly allow for separate fiscal accounting of school district warehousing operations.

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SCHOOL

STATE

WILSHIRF

¹This article is an adaptation of portions of the author's doctoral dissertation, titled, "The Development and Validation of a Cost Analysis Instrument for a School District Warehousing Operation."

Operation."

The number of schools served by the central warehouses of the eight districts varies from four to 56. Their average daily attendance ranges from about 3000 to 35,000.

"WAREHOUSE COSTS, A Cost Analysis Guide for School Administrators, was developed by Gordon G. Caswell, Arizona State University, Tempe, and used by him as the evaluation device for the warehouse administration study described in the accompanying article, Published in late 1960 by the author in cooperation with the university, the guide "has primarily been designed to provide for a more adequate cost accounting in relation to the storage and distribution of school supplies." With slight modifications, it can serve also as a cost analysis technic for such other warehousing activities as the storage of furniture and equipment.



"Our Audio-Visual program took wing once we found the key to teacher enthusiasm."

"As teachers, we're not necessarily mechanical wizards when it comes to operating movie projectors.

"But once we found a projector a teacher can operate, one that would not interrupt its own performance by some teacherbaffling mechanical problem, we became truly enthusiastic and our A-V program took wings.

"Now our teachers enthusiastically audition, preview, and cull, to find those films which are to their and to their students' best advantage. Perhaps the key to this was letting our teachers select the projector themselves—the Kodak Pageant Sound Projector, it turned out.

"Our faculty approved the Pageant Projector as a jury, you might say, after witnessing demonstrations of several new ma-

chines. They found they could operate it without any fussing. They liked its picture brilliance and sound quality. And the Pageant Projector looked to them (and me) mechanically simple and rugged.

"With this Kodak Pageant Sound Projector, we haven't had one case of film breakage in the two years we've owned it, nor have we had belt or cord problems or any other mechanical interruptions.

"As a result, our teachers willingly keep this projector whirring constantly in every course from Science to Home Economics, on every subject from library usage to personal hygiene."

If you would like a demonstration of the Kodak Pageant 16mm Sound Projector, call your Kodak A-V dealer. For literature, without obligation, write:

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School Lunch

(Continued From Page 108)

drinks, including milk, carbonated beverages, and iced tea. These programs generally are not financially needy and do not receive school lunch or "special" milk reimbursement.

Are these three school lunch programs of equal value to child health and the agriculture industry? The answer is an emphatic No!!

A Florida study shows that last year, in 1245 schools receiving school lunch reimbursement, the 527 (annual state average) pupils in daily attendance drank 455 one-half pints of milk each day (340 included in Type A lunch plus 115 one-half pints of [a la carte] "special" milk).

By contrast, in 222 schools receiving "special" milk reimbursement only, the 753 (annual state average) pupils in daily attendance drank only 420 one-half pints of milk per day. Each of these 222 schools had nearly 226 more pupils than the school lunch reimbursed schools, but pupils consumed 35 less one-half pints of milk per day.

Milk consumption figures for the 24 large schools not receiving any reimbursement are most discouraging. A study of September 1960 figures for this group shows that the typical school had about 1300 pupils in daily attendance and a daily milk consumption of only 226 one-half pints. This presents a rather tragic picture when one realizes that almost without exception these are large junior and senior high schools. Many of the girls marry and have children during or just after high school. Furthermore, these big high schools tear down the good food habits their feeder schools have developed.

Profit making stands that peddle poor food habits and Type A programs cannot be allowed to exist together any more than farm surpluses and hungry children should be allowed to exist together. There is no such thing as the peaceful coexistence of these two kinds of programs.

The weakest spot in our school lunch program is the questionable soundness of nutrition and education in some high school programs. We must devise ways and means, through practical research and experimentation, to make all programs nutritionally and educationally sound, if school lunch programs of the future are to meet pupil needs.

The total food offerings (including all foods and drinks available to pupils on the campus during the normal school day) should be limited to those necessary to meet the nutritional needs of pupils; to develop desirable food habits, and to promote an understanding and

(Continued on Page 152)





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FOR SCHOOLS

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By EDGAR FULLER

ADMINISTRATION'S public school bill (H.R. 4970) provides \$2,298,000,000 over three-year period for construction, salaries and special projects. Distribution is per capita on a.d.a.

The Administration's public school bill (H.R. 4970, by Representative Thompson of New Jersey) was introduced on February 28. It authorizes a three-year program of federal financial assistance for public elementary and secondary schools. It also amends Public Laws 815 and 874, which authorize federal funds to provide facilities, maintenance and operation of public schools in defense areas.

The basic intent of Congress is to improve the quality of public elemen-

tary and secondary education in all states and to reduce inequalities of educational opportunities within and between states. For this purpose the bill authorizes appropriations of \$666 million for the year beginning July 1, 1961, with \$766 million for the second year, and \$866 million for the third year.

Federal allocations would be made without matching by states or local districts. The formula would provide a minimum of \$15 per pupil in average daily attendance in public schools for the richest states in the first year, up to a maximum of \$29.67 for the poorest state. The corresponding ranges for the second year would be \$15 and \$33.80, and for the third year \$15 and \$37.69. Allocations are based on average daily (Continued on Page 130)

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the period of 1802, when the home of U.S. Presidents was built, if the plans of Mrs. John F. Kennedy materialize. The first lady has appointed 12 persons to serve on a special committee of the Fine Arts Commission. This committee will make a countrywide search for furnishings of the 1802 period; then it will raise money to purchase these pieces and present them as permanent gifts to the White House. Chairman of the committee will be Henry B. du Pont of Wilmington, Del.



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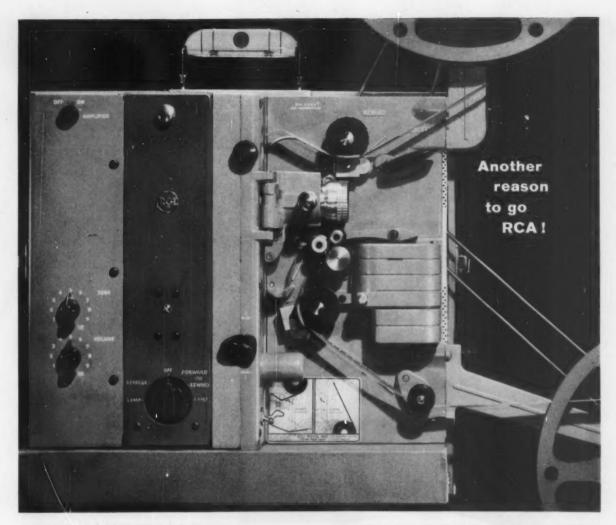
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Changes such as these represent RCA's continuing effort to improve the performance and dependability of its projectors. No, we haven't changed the basic design, and with good reason. That's because this design affords you what is—and always has been—the easiest threading film path of any projector on the market. You'll be glad we kept it that way!

Be sure you consider the new features and the familiar ones . . . when your RCA Audio-Visual Dealer demonstrates these new "E" Series Projectors. He's in your Classified Directory under "Motion Picture Equipment and Supplies." Call soon and see for yourself.



Report From Washington

(Continued From Page 128)

attendance and relative personal income of the respective states, with special provisions for the District of Columbia, Puerto Rico, Guam and the Virgin Islands.

The authorized uses for which the states may use the funds, on the basis of state plans, are construction of public elementary and secondary school facilities, employment of needed additional public school teachers, improvement of teachers salaries, and special projects directed to special or unique educational problems or opportunities. Except for

the 10 per cent for special projects during the first year, each state may divide its grants among the authorized purposes according to its own concepts of need. Funds at the rate of 10 cents per child in average daily attendance per year are provided for state administration, with upper and lower limits to any state of \$25,000 and \$150,000, respectively.

TEN PER CENT of first year's funds to be allotted to pilot, demonstration or experimental projects and evaluation programs.

The bill provides that each state agency shall use 10 per cent of the

funds allotted to it for the fiscal year beginning July 1, 1961, to defray costs of "...pilot, demonstration or experimental projects of local educational agencies designed to meet public school problems or to develop or evaluate public school programs of a special or unique nature...."

Examples are remedial instructional programs, adaptation of curriculums to the needs of deprived pupils or pupils at other disadvantages, special services for migrant pupils, programs to assist families and children in depressed areas, new types of elementary or secondary instruction and new uses for school facilities, programs to improve design of school facilities, and stimulation of educational excellence, including programs for exceptionally gifted children.

There will be some differences of opinion on details in the hearings scheduled for March in both the Senate and House. Among the backers of general federal support for education, these differences will be fewer than are likely to appear in connection with the extension of the National Defense Education Act and other educational legislation.

CONTINUES but reduces aid to public schools in defense areas (Laws 874 and 815). Cuts school construction aid to 25 per cent.

Titles 2 and 3 of H.R. 4970 extend the June 30 expiration date of important parts of Public Laws 874 and 815, with amendments.

Federal expenditures under these laws for construction, maintenance and operation of public schools in defense areas is approximately \$251 million this year. Unless the laws are extended before June 30, this amount will be cut to \$85,700,000 for next year. No one believes this will happen, but the Administration's amendments would trim the \$251 million for the current year to approximately \$158 million for next year. About \$72 million of the reduction would come under Section 3(b) of Public Law 874 and school construction for the "federal" children covered by this section.

Section 3(b) at present provides for federal payment of 50 per cent of the local share of the cost of providing education to children whose parents are employed on tax-exempt federal property but live in private homes, or are employed on private property and live on federal property. The federal share would be reduced to 25 per cent by the Administration's bill, which follows closely the theory that federal payments are in lieu of what federal property would bring in local property taxes if it were not exempt.

(Continued on Page 142)



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Listed in the Master Chart by number, the correct combination is at your fingertips. No unauthorized person need have access to this Master Chart, yet regardless of any switching of locks the correct combination is quickly available, identified by the number stamped on every Dudley lock.

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RP-5
Combination Padlock
with Revolving
Knob Pointer
Solid brass case with
white numbers on black



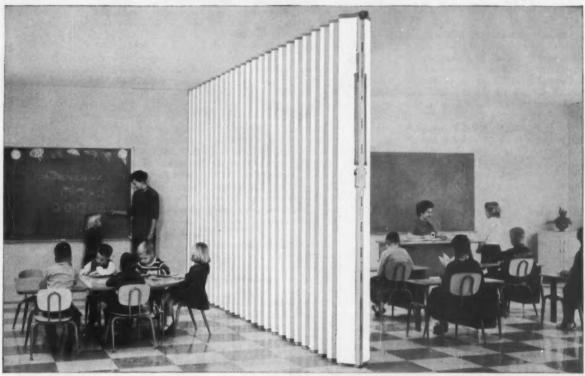
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The heart of Modernfold's sound superiority is in twin walls of steel panels beneath that luxurious vinyl . . . a dense, rigid barrier with eight sound-stopping horizontal edge seals custom-trimmed to the opening.

But this five decibel lead in sound control is only half the story. Because no other partition in the industry matches Modernfold heavy-duty construction. The chart at the right shows you why . . . comparing Modernfold's Soundmaster 240 with the best model offered by each of the next largest manufacturers.

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Partition	"240"	"A"	"B"	"C"
*Sound Reduction 125/4000 cps av.	37.4	32.4	31.8	27.9
354/4000 cps av. (Industry Standard)	41.8	35.8	36.4	33.0
Acoustic Panels	steel 5%" wide, wt. 1 lb./sq. ft.	uses cardboard	steel, 2¾ " wide, wt. ½ lb./sq. ft.	uses
Sealer Strips	8	8	4	4
Foam-Lined Jamb-Seal	yes	yes	no	no
Air Release	yes	no	no	no
Pull-In Latch	yes	yes	no	no
Best Fabric Weight— Outside Covering Only	45 oz. per lin. yd.	45 oz. per lin. yd.	18 oz. per lin. yd.	27 oz. per lin. yd.
Top Row Horizontal Hinge Plate Depth	8½″	3"	(vertical)	11/2"

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NEWS IN REVIEW

Role of Higher Education for National, International Interests is Explored at A.A.C.T.E. Convention

Chicago. — Concern for the "average" student and the responsibility of higher education to fashion its curriculum for the "average" student were stressed by the president of the American Association of Colleges for Teacher Education at its 13th annual meeting held here February 22 to 25.

Henry H. Hill, A.A.C.T.E. president and president of George Peabody College for Teachers, Nashville, Tenn., said: "The challenge is to create college courses and experiences of value to a host of average — not 'mediocre' — college-age young people. Let the selective colleges become more selective if they will, but let us not waste the value of average students or their good will or understanding of the brand-new revolution based on electronics and automation."

Dr. Hill upbraided scholars and educators for not being concerned with average students. "What do our bright intellectuals propose to do? Ground the 50 per cent of us who are average?" questioned the president. "Am I to be looked down upon with contumely because I play only an average game of golf? Away with such thoughts!"

Both Dr. Hill and the Rev. T. M. Hesburgh, president of the University of Notre Dame, spoke about the importance and the necessity for survival of private colleges. The two educators recommended that state or federal support be given to students in private colleges. The Rev. Hesburgh went a little further in citing tax credits and building grants or loans as possible sources of revenue for such institutions.

President Kennedy's proposed peace corps was criticized as being an "el'te corps" by Gale W. McGee, U.S. Senator from Wyoming. The peace corps, he explained, plans to send overseas only about 5000 to 10,000 carefully selected college graduates.

"The peace corps is tackling the problem from the wrong end. The rate of change in the world requires that we assault the problems of underdeveloped countries with numbers," he said.

Our greatest strength lies in the youth of our country, said Sen. McGee. He recommended that we send about a million young high school graduates and college students into other parts of the world to work. We must show the rest of the world, which is very poor and largely nonwhite, that we're not afraid to work with our hands, he explained. Farm boys could work on agricultural projects, and other youths could work in rice paddies or do other routine jobs, suggested the Senator.

Sen. McGee believes that draft boards should be replaced by a national resource board that would put American manpower in those countries where it is most needed. The Senator plans to submit this proposal to the President and Senate sometime this month.

In a talk called "The Teacher and the Professor," William G. Carr, executive secretary of the N.E.A., paraphrased James B. Conant by calling for "a truce among educators."

Dr. Carr said it is time to end the distrust and indifference that exists between public school teachers and college professors, and between professors of education and professors of other academic disciplines. "In many academic circles," said Dr. Carr, "the word 'meth-

(Continued on Page 134)

Catholic Leaders Plan Action on School Aid Plan

Washington, D.C. – Catholic churchmen met here recently to plan opposition to President Kennedy's school aid program, according to a recent *New York Times* report. The group consisted of five cardinals and 10 bishops and archbishops who head departments of the National Catholic Welfare Conference.

The annual conference reportedly was moved up a month because of the pressing school aid issue.

"The indicated intention of the Catholic hierarchy is to fight any school aid legislation that does not help meet the educational expenses of Catholics with children in parochial schools," the story said.

University of Chicago Names First Reavis Professor

Chicago. — The appointment of Roald F. Campbell as the first William Claude Reavis professor in education administration was announced recently by the University of Chicago.

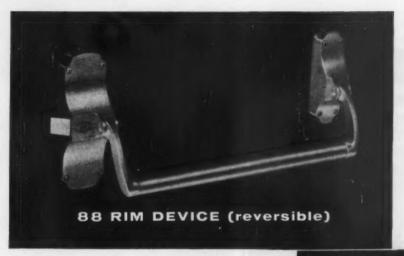
The late Professor Reavis had been a member of the university's faculty for 30 years.

Dr. Campbell came to the university in 1957. Previously he had been professor of education at Ohio State University for five years. He will continue to serve as director of the Midwest Administration Center.

. Photo by Tony Romano, Chicago



NEW A.A.C.T.E. PRESIDENT J. Ralph Rackley (right), dean of the college of education at Pennsylvania State University, receives gavel and block from Henry H. Hill, former A.A.C.T.E. president and president of George Peabody College for Teachers, Nashville, Tenn.



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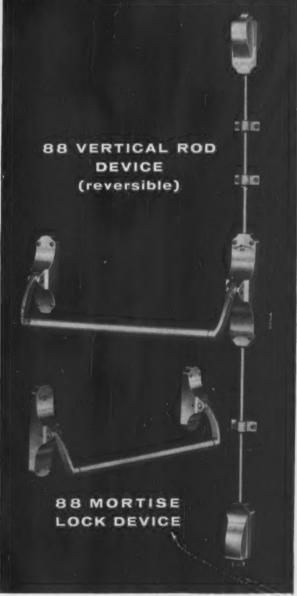


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DETTRA FLAG CO., INC.

Oaks, Pennsylvania

(Continued From Page 132)

ods' is like the word 'mother-in-law.' Both are stimulus words to which the nearly automatic response is either hilar-

ious laughter or anger.'

To alleviate the friction and see "American education in its totality." Dr. Carr made these recommendations: (1) Stop speaking about the different "levels" of education. Instead, think of our educational system as a whole entity. (2) Use a unified approach to finance public education. "Public desire to spend money for education is not so impetuous that we can afford the hazards of competitive and uncoordinated fiscal pleas from the several units of the school system." (3) Achieve a more realistic development of curriculums in the schools and colleges. (4) Develop more respect among all teachers.

The executive secretary called President Kennedy's proposals for federal aid to education a "great document in the

history of the nation."

The second Charles W. Hunt lecture was presented by Lindley J. Stiles, dean of the school of education, University of Wisconsin, Madison.

In his discussion of the "Revolution in Instruction," Dr. Stiles identified these characteristics of the revolution: "insistent demands for excellence in teaching, new designs for the utilization of the talents of teachers, adaptations of electronic devices to extend the contributions of good teachers to more students, development of machines to facilitate greater self-direction of learning, and the updating and reorganizing of content for courses.

In his appraisal of electronic aids to teaching, Dean Stiles would "vastly improve the quality of instruction" by substituting live or taped ETV presentations for the lecture or for "any class in which the pattern of instruction does not allow for laboratory work, student questions, and the exchange of ideas between student and teacher, or in which the rich audio-visual and library resources now available are ignored."

In its annual business meeting. A.A.C.T.E. admitted 42 institutions of higher education to membership, bringing its total membership to 577. Also, membership dues will be increased 50 per cent beginning in 1962. Whereas the annual minimum dues are now \$100 and the maximum dues are \$250 depending on the size of the institution, the dues will be a minimum of \$150 and a maximum of \$375.

With election of new officers, J. W. Maucker, president, Iowa State Teachers College, Cedar Falls, becomes presidentelect of the association. Two new members elected to serve on the executive committee are Lindley J. Stiles and John E. King, president, Kansas State Teachers College, Emporia.-M. WENGER

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Bol and Utility Cleaner is non-fuming—safe for septic tanks, too. And it's non-caustic. Will not burn hands. Safe on cotton or wool fabrics. Comes with the NEWEST PLASTIC APPLICATOR—supplied at no charge!

So safe, easy, efficient for these important cleaning jobs

Cleaning Toilet Bowls

1. Saturate swab mop.

3. Flush.

2. Thoroughly clean under rim, working downward.

and sparkle ...

Cleaning Urinals 1. Saturate mop.

- 2. Start at top and work down.
- 3. Flush.

Cleaning Stainless Steel

- 1. Saturate cloth or swab.
- 2. Wipe off surface to be cleaned.

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Educational Researchers Hold First Annual Meeting Without 'Embellishment' of School Superintendents

CHICAGO. - A pigmy can see farther than a giant when the pigmy stands on the shoulders of the giant. The applied research findings of today assume major proportions because they are "standing on the shoulders" of yesterday's basic research.

This was the theme of the keynote speaker at the annual meeting of the American Educational Research Association, which was in session here February 22 to 25. Addressing the registrants and guests was Nicholas A. Fattu, Indiana University, Bloomington.

The picture for educational research is not flattering, Dr. Fattu observed. Of the total expenditure for education, only about 5/100 of 1 per cent is set aside for educational research, as compared with the 5 per cent of income spent by industry. Also, of the personnel employed in educational research, at least 60 per cent is engaged by private industry, government or nonprofit or-

STANDARD

Models in the right sizes for schools, streets, buildings,

ganizations. Unless we give more attention to this field, said Dr. Fattu, in another decade there may be little research to worry about.

Observes 46th birthday. The American Educational Research Association is a national professional organization for educators with "a vital interest in the development, application and improvement" of research pertaining to education. Originally formed in 1915 as the National Association of Directors of Educational Research, it has since 1930 been a department of the National Education Association under the present name. Qualifications for active membership include not less than a master's degree. Active, associate and student affiliated members approximate 1800.

Heretofore A.E.R.A. has held its annual meetings concurrently with those of the American Association of School Administrators. At this first separate meeting, the registration total of 450 was about double that of last year.

Another innovation this year was the open meetings on the first day for five of A.E.R.A.'s 13 standing committees: mental hygiene, teacher effectiveness, test standards, research promotion, and international relations.

Hear general speakers. Also at the opening session, A.E.R.A. president, Chester W. Harris, professor of education at the University of Wisconsin, Madison, reported on the educational research being carried on in the U.S.S.R. This information was based on observations he made during Spring 1960.

The speaker at the only other general (other than joint) session was John B. Carroll of Harvard University. In his discussion of "Some Neglected Problems in Educational Research," Dr. Carroll stated that old habits of research have deflected many investigators from a head-on attack on vital current problems. He branded much of today's research as regressive, rather than progressive.

The banquet speaker was George E. P. Box, professor of statistics at the University of Wisconsin. Dr. Box emphasized that experimentation amounted to placing ourselves in a position to learn. He explained how statistics should be concerned with the strategy of investigation.

Report on studies. The major portion of each of the four conference days was devoted to reports on recent research studies by members. These reports were presented at 13 section meetings, with three sessions running concurrently. At certain of the meetings as many as 10 research papers were read within a 21/2 hour period - without a break or the

(Continued on Page 138)



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(Continued From Page 136)

benefit of coffee and donuts - suggesting the dedication of the researchers to their respective fields of interest. In all, 195 of the members who had registered, or about 43 per cent, were program participants.

Join other groups. At two general sessions and at certain section meetings, A.E.R.A. members joined those of other organizations holding meetings elsewhere in the city during the week:

American Association of Colleges for Teacher Education, National Association for Business Teacher Education, United Business Education Association and its divisions, National Council on Measurement in Education, National Society for the Study of Education, International Reading Association, and National Association for Research in Science Teaching.

Officers assume duties. A.E.R.A. officials for the 1961-62 association year were elected by mail ballot last January. They are: David G. Ryans, chairman, department of educational psychology, University of Texas, Austin, president; Walter W. Cook, dean, college of education, University of Minnesota, vice president (Dr. Cook automatically becomes president in 1962), and John C. Flanagan, president and director of research, American Institute for Research, University of Pittsburgh, executive committee member-at-large.

Continuing as a member-at-large is Frank W. Hubbard, assistant executive secretary for information services, N.E.A. Other members of the executive committee are: Chester W. Harris, by virtue of being the most recent past president; the new president and vice president; the editor of the organization's Review of Educational Research, and the editor of the A.E.R.A. Newsletter.

Official evaluates. Guy T. Buswell, A.E.R.A. executive secretary, explained that of the active membership of his organization about 14 per cent represents directors of research of public and private elementary and secondary school systems. The remaining members are research directors of educational organizations, professors in colleges and universities, and research specialists.

Asked whether A.E.R.A. would continue to hold its annual meetings separate from those of the A.A.S.A., Dr. Buswell said this had not been determined. He agreed that after separations of this type, other organizations generally have thereafter continued on their own. Superintendents generally had not attended A.E.R.A. meetings while they were "an embellishment of the A.A.S.A. convention programs," so this consideration will not be a factor in scheduling future meetings, Secretary Buswell explained.



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STEP ON IT! Step hard on back rest (as shown). If chair is a Samsonite, observe: contour steel back won't give an inch. No back rest made is stronger-or more comfortable!



STAND ON IT! Stand on rear of seat; lean back. If it's a Samsonite, don't worry. Samsonite chairs never tip over. Perfectly balanced. Amazingly strong, too. (The man above weighs 240 lbs.)



"UNBALANCE" IT! Place book or pads under leg of chair. Sit, as shown. If chair tilts or wobbles, it's not a Samsonite. All Samsonite folding chairs are self-leveling.



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FOLD IT! Grasp chair back; put foot on cross brace; pull gently. Samsonite chair will fold easily. (While you're at it, place finger in seat hinge. No danger. Samsonite safety hinge can't pinch.)



SIT IN IT! Instantly you'll know the difference. Observe that Samsonite folding chairs are contourdesigned (both seat and back rest) for maximum comfort. Good looking, too.



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The Smith-Corona Compact 200 is a full-featured electric office typewriter. Yet it's compact . . . just half the bulk of conventional electrics. In one compact package you get a teaching tool with a full-sized electric keyboard . . . full-sized carriage with automatic return . . . automatic repeats. Here is everything you need to teach electric typing effectively and easily. No discipline hazards. No frills. It's simplified!

Of course, it's important today to teach electric typing, because modern business calls for typists familiar with electric machines. And in school or out, there is no electric typewriter more economical, more efficient than the new Smith-Corona Compact 200.

See this new kind of teaching typewriter at work in your classroom. Just contact your Smith-Corona representative for a demonstration. And ask about the complete portfolio of teaching aids available without obligation.



Board Buys 'Schools Center' For Occupancy

DETROIT. — A problem that has faced school boards here since 1883 has been solved with the purchase by the current board of the Maccabees Building, Woodward and Putman avenues, for a cash price of \$2,600,000. The 15 story and basement, fire resistant office structure, to be known as Schools Center, is being occupied by the various public school services and administrative offices over a three-year period.

Heretofore, 135,200 square feet of space have been occupied in 18 separate buildings scattered across the city, and additional space was needed.

Samuel M. Brownell, superintendent of schools, said that the purchase was part of a five-year building proposal of a citizens advisory committee. The new headquarters was built in 1927 and is situated centrally as an integral unit of the city's art center, together with the library, museum of art, historical museum, Rackham Foundation, and the campus of Wayne University. Three floors are air-conditioned, and automatic elevator service has been installed.

The plan for occupancy, Dr. Brownell reports, provides space for offices, meetings and conferences, storage for pupil-personnel-financial records, work areas for central school services, a professional library, waiting room space, limited food service, restrooms, and educational radio and television production facilities. An official estimate is that the construction cost of equivalent facilities today would approximate upward of \$5.5 million.

Ah He! An electronic scoring machine has made some mistakes — about a thousand of them. Wrong scores were reported for that many students who took the College Entrance Examination Board tests last December because the machine failed to "read" some of the students' identification numbers on the answer sheets. Some students received scores for tests that they did not take. Human failures also account for part of the error, it's only fair to report. There were those who did not copy their identification numbers correctly.

Sailing Along. The John W. Brown, a "wing" of Metropolitan Vocational High School in New York, last December celebrated its 14th anniversary as a school ship. Since 1946 students have received part of their non-academic training in the 441 foot vessel, which includes building lifeboats and maintaining and repairing them. A classroom atmosphere within, the ship was a gift to the city from the Federal Maritime Administration.

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is a colorless, semi-permanent primer that fills the pores of composition floors, makes dressings adhere better, stay

glossier, wear far longer. It never yellows, laps or streaks; applies easily with mop. No leveling problems. Stripping dressing won't disturb First Coat, and unlike sealers, it can be removed! An excellent cost-cutting way to restore old floors, eliminate efficiency-robbing chemical action between new floors and dressing.

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Healthful...Quick...Low Cost PROFITABLE, TOO

Schools throughout the country serve nutritious, low-cost milk shakes quickly and easily from modern, sanitary, efficient Sweden ShakeMakers."

Want to keep food costs down? Average cost of a nourishing 12-ounce milk shake (selling for 15c) is 6c, including cup. That's a 9c profit for your school-lunch program or for school projects or activities.

Need fast service? Student help can serve eight 12-ounce milk shakes per minute from a Sweden ShakeMaker-hundreds during a lunch period.

Concerned about sanitation? You buy milk-shake mix from your own dairy. It is delivered in sealed cans and dispensed directly from your Sweden ShakeMaker—approved by the National Sanitary Foundation.

Want to encourage students to eat hot lunches in your cafeteria? Milk shakes attract students, help keep them on premises during lunch period, help assure their getting a good lunch.

School Ups Sale of Dairy Products 300%-Profits Help Build Grandstand

Sweden ShakeMakers were installed at Clover Park high school four years ago—one in the snack bar of each of the two school lunchrooms.

Snack-bar profits go to the Associated Student Body Fund rather than to the lunch program. But because snack bars attract more students to the lunchrooms, they have helped this school's cafeteria operate at a profit.

Sales of dairy products are up 300% since the first installation. Clover Park now has two Sweden ShakeMakers and three Sweden SoftServers*. Net profit during a recent school year: \$5,330.96.



Lunchroom bead cook Carolyn Simons points with pride to Clover Park's new grandstand. Profits from the sale of milk shakes and ice cream helped build it. These profits have also bought choir robes and basketball backboards for this Tacoma, Washington, school.



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Report From Washington

(Continued From Page 130)

The Administration says the facts are that only about 25 per cent of the assessed valuation in these defense areas is in federal properties and that 75 per cent is in the worker's homes, rather than a 50-50 division of these classes of property as is assumed by the present law. These also would be a similar reduction (from 50 per cent of the state average for pupil construction costs to 25 per cent of such costs) in federal payments for school construction for this category of children.

The second most important amendment in the Administration's bill would increase the percentage of "federal" children whose educational costs must be "absorbed" by the local school district before it becomes eligible for federal payments. The current absorption requirement of 3 per cent would be increased 1 per cent each year until it reaches 6 per cent in 1963-64. With "absorption" at 6 per cent, it has been estimated that 1000 districts which now receive comparatively trifling federal funds would be eliminated from this special federal aid with a total loss of no more than \$2 million.

The large number of school districts involved provides a clue to congressional reaction. Numerous congressmen represent districts that are among the more than 4000 that now receive federal payments and enroll nearly 25 per cent of all public school pupils. There is considerable congressional sentiment for extension of the laws without amendments.

The Administration's case is rational. There has been time for adjustment of school budgets in many defense areas, so that school districts often could get along without the 1 or 2 per cent of their total costs paid under the authority of Public Laws 815 and 874. The Administration adds that the general support title of its bill will more than replace the amounts locally absorbed. Observers in Washington, however, say that the Congress may ignore these arguments because loss of even \$500 in any congressman's district may cause criticism.

PRESIDENT'S MESSAGE hailed as great break-through, endorsed by N.E.A. Payment of funds to church-controlled colleges included in federal scholarship additional allowances.

President Kennedy's message to Congress on education was delivered February 20, and was widely hailed as a great break-through in the field of federal support of education. Such it undoubtedly was, and the National Education

(Continued on Page 144)

66 Our cost for fuel this first year was nearly ten per cent below the amount budgeted.

. says John A. Whitehead Superintendent of Schools, Union Free School District No. 2 Eastchester, New York

> BOARD OF EDUCATION UNION FREE SCHOOL DISTRICT NO. 3 EASTGHESTER, NEW YORK

Eliminating nadiators and convectors provides additional valuable space not available with conventional systems -also lower initial accommodation costs

Floors are always warmer than the

remperature since the Burgess-Manning

ceiling does not

depend on air movement for heat transfer there

are no drafts

JOHN A. WHITEHEAD SUPERINTENDENT OF SONDOLS OF CRAWFORD STREET EASTCHESTER, NEW YORK

September 20, 1960

Mr. Ivan Park Jacobson and Company, Inc. Burgess-Manning Division 227 East 44th Street New York 17, New York

We have finished one complete school year with the Burgess-Manning Radiant Acoustical Cailing method of heating. You will be interested to know that this experience has been most satis-

When inspecting this heating system with you two years ago, you will recall that I was impressed with the everment and lack of draftiness. There were functional advantages too, and lack of draftiness had to be allocated to heating equipment in that no floor space had to be allocated to heating equipment and teachers had complete freedom of room arrangement without regard to problems of heat circulation.

These advantages have been realized fully and we have also had the pleasure of eliminating unanitary pillows, blankets, or other materials when children sit on floors since the floors are warm and comfortable at all times. Our cost for fuel this first year was nearly ten per cent below the amount budgeted which reads us to believe that this will be an economical system to operate.

Perhaps from an administrative point of view, the best feature of all was that the system worked from the day we started with practically no adjustments.

Hearty congratulations!!!!

Very truly your John A. Whitehead Superintendent of Schools

JAW: pab

Mr. Whitehead's letter confirms the superiority of the Burgess-Manning Radiant Heating, Cooling and Acoustic Ceiling . . . which offers schools

- maximum pupil comfort
- · acoustical efficiency
- attractive appearance
- structural simplicity
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maintenance savings

From the standpoint of comfort and efficiency in schools large and small . . . there is no comparison with the Burgess-Manning Radiant Heating, Cooling and Acoustic Ceiling!

No other heating

method provides

the same uniformity

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Maximum heat

substantial fuel

economy with maintenance costs

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transher efficiency is attained with

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BURGESS-MANNING COMPANY

Architectural Products Division 749 East Park Avenue e Libertyville, Ill. (Continued From Page 142)
Association immediately announced that it ". . . will support the President's program without 'ifs' or 'buts.'"

There was one statement in the message, however, which we question. In discussing federal scholarships the President said: "They (the scholars) would be permitted to attend the college of their choice, and free to select their own program of study. Inasmuch as tuition and fees do not normally cover the institution's actual expenses in educating the student, additional allowances to the college or university attended should accompany each scholarship to enable these institutions to accept the addition-

al students without charging an undue increase in fees or suffering an undue financial loss."

This raises questions of both constitutionality and public policy about the payment of public funds to church-controlled colleges and universities for institutional costs. The individual benefit theory of constitutionality concerns funds paid to students, as thus far interpreted by the courts.

On March 2, the President answered a press conference question about federal aid for private and parochial colleges and universities. There was no mention of federal payments to institutions for institutional expenses. "Well,"

he said, "the aid that we have recommended to colleges is in a different form. We are aiding the student in the same way the G.I. Bill of Rights aided the student. The scholarships are given to the students who have particular talents, and they can go to the college they want. In that case, it's aid to the student, not to the school or college, and, therefore, not to a particular religious group. That is the distinction between them, except in the case of aid to medical schools, and that has been done for a number of years and because that's a particular kind of technical assistance. A constitutional question has not arisen on tha matter."

As this is written, the Administration's scholarship bill has not been introduced, and we hope that when it appears it will follow the position taken in the press conference rather than the one taken in the message to Congress on education. Funds under the first G.I. Bill were paid directly to institutions, but only for tuition and fees. Under these circumstances, the law was never challenged in the courts because no one wanted to interrupt the education of the millions of returning veterans. There was a much greater shortage of facilities in 1946 than there is now, since 400 accredited colleges and universities currently have room for more students.

The Korean C.I. Bill of Rights eliminated direct payments to institutions in 1950, and, thereafter, the so-called "Springer Amendment" to restore such federal contributions to institutions was defeated time after time by the Congress. Now the drive is on again, despite widespread opinion that direct federal cash payments to church-controlled colleges and universities is unconstitutional and contrary to public policy. General purpose funds beyond tuition and fees are involved, and they are related to entire institutions rather than to individual scholars.

PROPOSED AID to higher education would abandon the policy of church and state separation and would violate state policies.

In recent years, the colleges and universities have been unhappy with scholarships or fellowships alone, federal or otherwise. They seek to extend the constitutional theory of benefit to the individual to the sectarian institution itself. The National Defense Education Act of 1958 moved in that direction. The order of the Eisenhower Administration directing federal funds to sectarian institutions for facilities and operating expenses through the National Institutes of Health and the National Science Foundation went much further.

In 1958, the American Council on (Continued on Page 146)

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(Continued From Page 144)

Education espoused the idea that all colleges and universities should receive federal funds without regard to the type of institutional control, thus choosing the policy position of its large number of nonpublic constituent members. The A.C.E. followed with a more complete statement in 1959, gingerly avoiding the constitutional issue and "closing ranks" to obtain federal funds by saying that the crisis in higher education must be met by public funds for all institutions alike in the national interest.

The report of the President's Advisory Committee on Science of Nov. 15, 1960, provided an even more complete rationale for A.C.E. policy. This committee contended that the national interest requires that in the fields of science and mathematics, and perhaps in other fields, accredited colleges and universities should have permanent federal financial support, both for physical facilities and for current expenses of graduate education.

Then followed the Nixon "position paper on education," Sec. Arthur S. Flemming's press conferences, the Flemming task force report on federal support of education, and finally the report of the Kennedy task force on education, all more or less "closing ranks" in abandonment of the policy of separation of church and state in the field of higher education. On Feb. 11, 1961, the A.C.E. called for \$6 billion of federal grants and loans in four years to be used by colleges and universities and their students, without distinction among public, independent private, and church-controlled institutions.

Among all these, only the Kennedy task force proposed any qualifications. It recommended that neither federal grants nor loan funds should be used to pay for physical facilities used for "religious workship" or "sectarian in-struction in any religious faith." President Kennedy did not accept this theory as far as federal grants are concerned. He specifically eliminated any federal grants for physical facilities of churchcontrolled instutitions, and for others

Since churches base their insistence upon church-operated schools on the ground that religion pervades all instruction, and since constitutional freedom to do so was granted in the Oregon case by the Supreme Court on this ground, there appears to be no real distinction between religion as such and education with a component of a particular religion in it that pervades the entire institution.

Most federal research and development contracts are made with a limited number of colleges and universities, and both secular and church-controlled pri-

(Continued on Page 148)





Bakersfield, California, finds Royal Electrics "inexpensive to maintain."

"We've been using Royal Standard and Electric typewriters for several years," says Mr. Hunter, "and in those years we've found them very satisfactory. Royals are easy to operate and inexpensive to maintain." Which are two good reasons, Mr. Hunter, why over half the typewriters in the nation's classrooms are Royals.

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vate colleges and universities may share in these contracts. Federal scholarships and fellowships based on individual need, rather than for the purpose of supporting institutional costs of church-controlled colleges and universities, appear to be within federal constitutional boundaries when used in any type of approved institution. There is no shortage of avenues to more than enough colleges and universities fully to serve the national interest within constitutional laws and traditions.

Proposals to supply public funds to church colleges are argued on the basis that the national interest requires federal funds for all types of higher institutions. These proposals violate the policies of most of the states as expressed in their constitutions and laws. Proof is lacking that the national interest requires federal funds for the general support of church colleges and universities enough to justify such federal interference with general state policies. Federal payments for institutional costs in connection with scholars and fellows having federal support are among the undecided cases yet to be settled by Congress, and perhaps by the courts.

PHYSICAL FITNESS emphasized by President at White House Conference, with 300 foreign exchange teachers among the guests.

The first White House Conference of this Administration came on February 21; it was on physical fitness — one of the President's major concerns in connection with the welfare of Americans. Called by Secretary of Health, Education and Welfare Ribicoff, the conference brought together some 100 educators, as well as specialists in health, physical education, and recreation, with almost as many representatives of cabinet departments, government agencies, and the armed services.

Recommendations of the conference included increased support of current programs now in effect in the U.S. Office of Education, the Public Health Service, Children's Bureau, and other federal agencies, together with greater emphasis on physical fitness by public and private agencies, individuals and parents.

Speaking to the conference, President Kennedy said: "Since the time of the ancient Greeks, we have felt there was a close relationship between a strong, vital mind and physical fitness. It is our hope that using the influence of the national government, we can expand this strong spirit among American men and women. . . . It is my hope that mothers and fathers . . will be concerned about this phase of their children's development; that the communi-

(Continued on Page 150)

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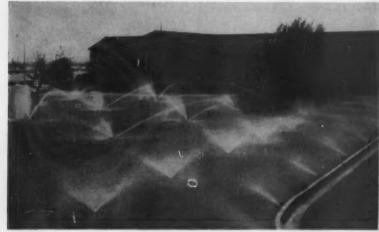
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(Continued From Page 148)

ties will be concerned, to make it possible for young boys and girls to participate actively in the physical life."

Attorney General Robert Kennedy referred to the President as "the real athlete of the family." But if a poll had been taken on popularity, brother Bobby would have rated almost as high as the President at the conference. And for 300 foreign exchange teachers from 68 countries who were invited to hear the President, shaking hands with both Kennedys and enjoying their warm smiles and words of welcome will certainly be the highlight of their stay in the United States.

Among the challenges of the conference was the question of definitions. Just what is meant by "physical fitness"? Dr. Janet Travell, the President's personal physician, came up with this: "Physical fitness implies physical stamina to meet the demands of modern life. Such stamina depends not only on physical strength, coordination and development, but also on sound health and nutrition, and mental, emotional and spiritual stability." It was approved by one of the study groups of the conference.

On the Shelf

(Continued From Page 30)

and plays, reaching out to enlarge and integrate their experience of what it is good to know and do.

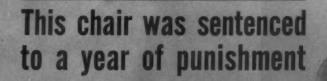
As I go back over the only-in-America chapters of this case book, I conclude that we already have several kinds of bests as well as experimental programs that point to even better bests. None of the enrichment in the schools described here could be accounted mere busy work. With skilled teachers it need not be that anywhere. We can do well by our best youngsters — and we can do it in the cosmopolitan high school.

On our blue chips, one will still get us 10. The trouble seems to be that not enough of us have bet enough,

"Which does not in the least imply, That other kids should be passed bu.

Only the rash would dare to diddle, By playing ends against the middle; That's where we always boast of us, That you will find the most of us."

A Chance for Education? At a recent public hearing of a joint legislative committee on school financing in Albany, N.Y., two sources of revenue were suggested to help hard-pressed school districts meet costs — a state or regional sales tax and a state lottery. Speakers also pressed for sources other than real estate taxes, which they said, were already high enough.



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School Lunch

(Continued From Page 126)

appreciation of the kinds of food necessary to maintain good health.

Food service pattern is a safeguard. One approach to safeguarding the nutritional adequacy of the school lunch program is the development of a food service pattern. A nutrition standards committee of the Florida School Food Service Association has developed such a pattern, which was endorsed by the state association at its 1960 annual convention. It is now used as the official pattern for reimbursed programs in

Florida and is recommended for all school lunch programs. (Copies are available on request.)

We must objectively analyze the pros and cons of new school lunch trends and products, such as prefabricated foods, new types of equipment, satellite programs, and the centralization of some functions.

States have been working for years to consolidate small schools. Certain functions of school lunch operations may need to be consolidated. For example: One bookkeeper in a central system may be able to relieve many schools of some routine bookkeeping tasks. Purchasing is another area where centralization may

be desirable. The purpose of this is not to take authority and responsibilities away from managers and school principals, but to relieve them of routine functions someone else can perform equally well, so that they may devote time to other important functions now being neglected for a lack of time.

Continue to upgrade school lunch personnel. No program is any better than the personnel who operate it. Program growth and improvements bear eloquent testimony to school lunch personnel and the vigilance of these competent guardians of child health. We must gather facts, study needs, and develop a sound and aggressive program of action to meet personnel needs. This should have a very high priority in efforts to improve school lunch programs. We cannot rest until we have improved and protected the status of school lunch personnel to the extent that many of the finest young people of this country will enter the field as their chosen career. The nationwide upgrading of personnel and the development of sound personnel standards, benefits and practices need immediate attention.

Face the need for dining room supervision. Another personnel matter involving the school family deserves attention. We are possibly on the brink of having a problem of teacher-school lunch relationships. At least one state board of education has passed regulations giving all full-time teachers a duty free lunch period. In doing this, they did not provide for adequate dining room supervision.

This school year when some New York City teachers went on strike, one of their demands was a "duty free lunch period." We should not wait until schools are involved directly in a ticklish situation of teacher-school lunch relations to explore ways and means of solving the problem in a positive way. Much of the success of the program depends on teacher attitude and cooperation. We must keep teachers as friends and supporters of the program.

Too much for milk; too little for Type A lunch. The national school lunch appropriation has become less adequate each year because it has not kept pace with program growth. By contrast, "special" milk funds have been increased yearly and are more than adequate. Last year, Florida returned to 'the federal government more than \$57,000 of "special" milk funds that could not be used. Schools received an average of 2.95 cents for each one-half pint of "special" milk (a la carte milk) and only an average of 2.75 cents for each Type A lunch, which included one-half pint of

(Continued on Page 154)

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FAIRCHILD CAMERA AND INSTRUMENT CORP.

(Continued From Page 152) milk and used agriculture food products valued at 25.9 cents. Furthermore, when schools receive more reimbursement for one-half pint of "special" milk than they receive for a complete Type A lunch, the tail begins to wag the dog. This inequity needs to be corrected. Bills were introduced in the last session of Congress to do just that. They will be debated during the current session.

The American School Food Service Association and other groups interested in child nutrition and school feeding will work actively to obtain needed improvements in federal aid programs. Groups of school lunch leaders have been meeting to study the problem and to make recommendations to solve it.

The development of standards or evaluative criteria is difficult, but important. We need, in clear, simple, specific words, the nutritional, educational, personnel, sanitation, facilities, records and participation standards that all school lunch programs should meet.

Accrediting agencies neglect school lunch standards. Evaluative criteria used by school accrediting associations need to include more adequate criteria for evaluating the school lunch programs. For example, a fairly detailed scanning of the National Study of Secondary Schools Evaluation - Evaluative Criteria, 1960 edition, seems to show that content relating to the nutrition, education and personnel aspects of the school lunch program is rather superficial as compared to the material covering other segments of the school program. For example, there was no mention of the fact that lunches should meet one-third of the pupils' daily food needs. The chapter on "School Staff and Administration" contains a rather detailed evaluative criteria relating to the noninstructional staff. This is limited to secretarial, custodial and maintenance staff, and health and medical staff. There is no section dealing with school lunch personnel. A further comparison shows that under "Transportation of Students," several items cover bus drivers. Whereas, in the brief section entitled "Lunchrooms, Dining Rooms, and Kitchens,' the content is of such a nature that each person can use his own interpretation in scoring the school.

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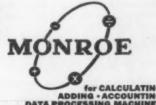


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About People

Changes in Superintendencies NORTHEAST

Robert H. Seitzer, acting superintendent, East Orange, N.J., to superintendent there.

Mario P. Grippi, Belvidere, N.J., to West Milford, N.J.

Robert A. Coyle, principal, James J. Ferris High School, Jersey City, N.J., to superintendent, Jersey City.

Merton L. VanSant, director of elementary education, Gouverneur, N.Y., to superintendent there, effective July 1. He succeeds Frank W. Mason, who resigns.

Chris G. Patrinos, high school principal, Lancaster, Mass., to superintendent-principal, Nashoba Regional School District, Bolton, Mass.

MIDWEST

David A. Blumenthal, high school principal, Concord, Mich., to superintendent there, effective at the end of the current school year.

Erwin J. Kleinert, Rockford, Mich., to Kent County, Grand Rapids, Mich., effective July 1. He succeeds Lynn H. Clark, who retires after 25 years as superintendent there.

Jack H. Sloan, Hope, Kan., to Smith Center, Kan., effective at the beginning of the 1961-62 school year.

Lawrence A. Dussliere, principal, Riverdale Junior High School, Hillsdale, Ill., to superintendent, Cordova, Ill.

Milton J. Cohler, superintendent, School District No. 14, Chicago, to assistant superintendent in charge of education extension, Chicago.

SOUTHEAST

Oscar H. Walker, principal, Manley Elementary School, Morristown, Tenn., to superintendent, Hamblen County, Morristown, Tenn.

William F. Smith, athletic director, Bradley High School, Cleveland, Tenn., to superintendent, Bradley County, Cleveland, succeeding Sim L. Beaty, who retired.

W. T. Woodson, superintendent, Fairfax County, Fairfax, Va., effective in June.

Broward Lovell, superintendent, Marion County, Ocala, Fla.

SOUTH CENTRAL

C. R. Sanders, assistant superintendent, Rapides Parish School District, Alexandria, La., to superintendent there, effective July 1. He succeeds J. S. Slocum, who resigned.

R. O. Machen, assistant superintendent and supervisor, Webster Parish (Continued on Page 158)



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About People

(Continued From Page 156)

School District, Minden, La., to superintendent there, succeeding J. E. Pitcher, who retires.

Marvin E. Curtis, supervisor of adult education and of teaching materials and supplies, Livingston, La., to superintendent there, effective July 1. He succeeds Ernest S. Easterly, who retires.

Charles G. Cowsert, high school principal, Marvelle, Ark., to superintendent there, effective July 1.

A. R. Stroud, high school principal, Salem, Ark., to superintendent there.

James O. Lancaster, director of scholarships and placements, Northeast Louisiana State College, Monroe, to superintendent, LaSalle Parish School District, Jena, La., effective July 1. He succeeds F. H. Shiel, who retires.

Joel W. Price, assistant superintendent, Aztec, N.M., to superintendent there. He succeeds C. V. Koogler, who retires at the end of this school term after 26 years as superintendent there.

WEST

Howard C. Seymour, superintendent for six years, Rochester, N.Y., to superintendent, Union High School District and Junior College, Phoenix, Ariz. (See "On the Shelf" report, The NATION'S SCHOOLS, February 1961.) Dr. Seymour is a member of the commission on juvenile dilinquency, U.S.O.E.

Elton Fishback, rural supervisor, Polk County, Dallas, Ore., to superintendent there. He succeeds F. C. Green, who retires after 16 years as superintendent

there.



Leon P. Minear

Leon P. Minear, principal. Benson Polytechnic High School, Portland, Ore., to superintendent of public instruction, Oregon State Department of Educa-

tion, Salem. He succeeds Rex Putnam, who retired after 23 years as superintendent there. Dr. Minear served as president of Stockton Junior College in California for three years before going to Portland in 1952. He has been chairman of the Oregon Secondary Curriculum Commission since 1953.

James Cherry, acting superintendent, Union High School District, Garden Grove, Calif., to superintendent there.

Harold R. DePue, Kentfield Elementary School District, San Anselmo, Calif., to Elementary School District, Oxnard, Calif., effective July 1. He succeeds Richard M. Clowes, who becomes associate superintendent in charge of the division of instruction, California State Department of Education, Sacramento.

Louis Bruno, Pullman, Wash., to Washington State Department of Public Instruction, Olympia.

Other Appointments . . .

Harold W. Boles, educational consultant, Joseph Baker and Associates, architects, Newark, Ohio, to associate professor of education, Western Michigan University, Kalamazoo.

J. Harry Adams, superintendent, Elizabeth, N.J., to assistant commissioner of education, and head of the division on civil rights, New Jersey State Department of Education, Trenton. He succeeds John P. Milligan, who resigned to represent this country as chief education adviser to the government of Ecuador.

John W. Harold, superintendent, Cedar Falls, Iowa, has accepted the position as executive secretary of the Iowa State Education Association, effective July 1. He served as superintendent at Oakland, Hartley and Carroll, Iowa, before coming to Cedar Falls in 1955. Mr. Harold is also president of the board of directors of the Iowa Center for Research in School Administration.

(Continued on Page 160)



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(Continued From Page 158)

Newell B. Walters, formerly director of employe services, Denver, to consultant on teacher welfare, N.E.A.

Resignations . . .

Hugh L. Smith, superintendent for nine years, Eudora, Ark., effective June 30.

William B. Simpson, Caesar Rodney Special School District, Camden, Del., effective July 31, after 23 years as superintendent there.

W. D. McMullen, superintendent for two years, Bonner Springs, Kan., effective at the end of the current school year.

Jack M. Ryder, Cassopolis, Mich., effective July 1, after three years as superintendent there.

I. J. Miller, superintendent for five years, Bucyrus, Ohio, effective July 31.

J. H. Hulvey, superintendent, Marysville, Wash., effective at the end of the current school year.

Lucille D. Rosenow, Golden Valley School District, Minneapolis, effective June 30, after five years as superintendent there.

Hal O. Hall, superintendent since 1957, School District No. 88, Elmhurst,

James F. Redmond, superintendent for eight years, New Orleans, who will not renew his contract on July 1. Prior to 1953 he was administrative assistant to the superintendent in Kansas City, Mo., and Chicago. He has been a member of The NATION'S SCHOOLS' editorial advisory board since 1953. Dr. Redmond will join the management consultant firm of Booz, Allen & Hamilton, Chicago, becoming its eastern director of school administrative services with offices in New York City.

Retirements . . .

Arthur M. Judd, superintendent, North Brunswick, N.J., effective June 30.

Hugh V. White, Nansemond County, Suffolk, Va., effective June 30, after 27 years as superintendent there.

William J. Burkhard, Sacramento, Calif., after more than 12 years as superintendent there. Previously he served the city as principal, assistant director of research, assistant superintendent in charge of elementary and junior high schools and special schools, and deputy superintendent.

L. J. Smith, superintendent, Massillon, Ohio, effective July 1.

W. Guy Brown, superintendent for 10 years, Decatur, Ind., effective July 1. He has been in the school system for 45 years. (Cont. on p. 162)







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(Continued From Page 160)

Walter L. Bumgardner, East Aurora, N.Y., effective at the end of the school year. He has been superintendent there since 1933.

Clyde F. Potter, business manager and secretary-treasurer, Boise Junior College, Boise, Idaho, after 30 years in the public school system there.

Alfred C. Lamb, director of buildings and grounds, Wayne State University, Detroit. He has been assistant exhibits manager of A.S.B.O. and was one of the founders of the Michigan Association of Public School Business Officials.

John W. Dodd, Freeport, N.Y., effective in June, after 36 years as superintendent.

Warren A. Allison, Rio Linda, Calif., effective June 30, after 28 years as superintendent.

Deaths . . .

William D. Reeve, 77, former head of the department of the teaching of mathematics, Teachers College, Columbia University.

Frank A. Burtsfield, 81, retired superintendent, West Lafayette, Ind. He was superintendent there from 1913 to 1945. Walter J. Ksycki, 44, Breese, Ill., after 14 years as superintendent there.

Harvey H. Lowrey, 82, former superintendent, Dearborn, Mich. He was superintendent for 24 years. Dr. Lowrey had been president of the Michigan Education Association for two terms.

Milburn P. Anderson, 57, Berkley, Mich. He has been superintendent there since 1939.

Robert E. Simpson, 55, Alhambra School District No. 68, Phoenix, Ariz., after 16 years as superintendent there.

L. M. Goza, 71, retired superintendent, Arkadelphia, Ark.

Robert Alvin James, 62, White Hall School District, Pine Bluff, Ark., after 18 years as superintendent there.

John W. Withers, 92, dean emeritus, school of education, New York University. He was superintendent of schools in St. Louis from 1918 to 1921.

Sidney Gordon Gilbreath, 91, retired superintendent of both city and county school systems, Chattanooga, Tenn.

M. G. Patton, 65, St. George, S.C., after 28 years as superintendent there.

Carl T. Pfisterer, 68, retired superintendent, Brodhead, Wis. He was superintendent there for 32 years.

Joseph T. Yurkewitch, 56, Susquehanna, Pa., after nine years as supervising principal there.

N. Earl Walker, 53, superintendent for the last six years, Willard, Mo.

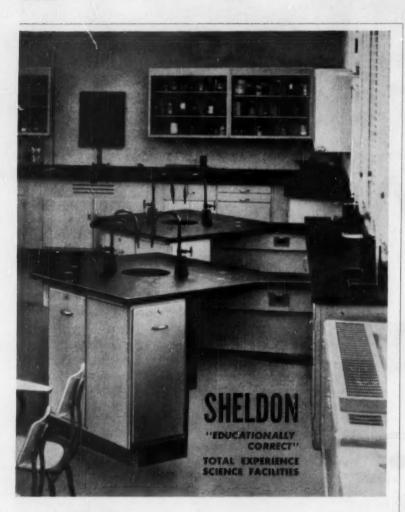
Nolan C. Kearney, 58, assistant superintendent in charge of research and curriculum, St. Paul.

High School Seniors 'Teach' Values in Elementary School

University City, Mo. — Six teams of high school seniors here are attempting to help teach fifth and sixth graders moral and spiritual values by visiting and being "good examples" in the classrooms about 45 minutes twice monthly. The pilot program is an effort to augment the present programs of teaching good character.

"The objectives of the program are to provide opportunities for intermediate-age children to relate themselves rather closely to a teen-age young lady and teen-age young man; to provide the intermediate-age children with excellent living 'images' of today's teen-agers, and to provide, in a foster manner, the 'big brother-big sister' that many youngsters don't have," according to Earl Greeson, principal of the Delmar-Harvard elementary school, where the experiment is being conducted, and program head.

Evaluations of the programs will be made by the pupils in the fifth and sixth grades, the participating high school students, and the teachers.

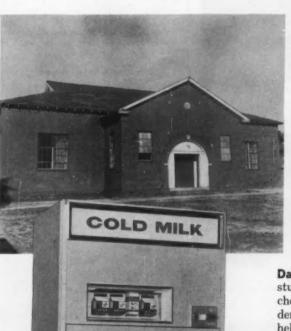


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Television and Our Schools. Donald G. Tarbet, University of North Carolina. Ronald Press Co., 15 E. 26th St., New York 10. Pp. 258. \$5.

ADULT EDUCATION

Continuing Education and Public Responsibility. University of the State of New York, Albany. Pp. 44.

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Manual for School Accounting. Herbert S. Mitchell. Interstate Printers and Publishers, Inc., 19-27 N. Jackson St., Danville, Ill. Pp. 87. \$3.

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American Educational Research Association. N.E.A. Pp. 91.

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Reflective Thinking: The Method of Education. H. Gordon Hullfish, Ohio State University, and Philip G. Smith. University of Tennessee. Dodd, Mead & Co., 432 Park Ave. S., New York 16. Pp. 266. \$2.95.

Thought Patterns. Vol. 8. Edited by Blaise J. Opulente, St. John's University. St. John's University Press, Jamaica, N.Y. Pp. 167.

FINANCE

Recommendations on Public School Support. Calif. State Prtg. Off., Sacramento. Pp. 378.

GOVERNMENT AND EDUCATION

New Light on Federal Support. Central Michigan School Administrators' Research Association, Mt. Pleasant. Pp. 16.

Federal Funds for Science. U.S. Govt. Prtg. Off. Pp. 89. 50 cents.

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How To Express Yourself Vocationally. Revised ed. Delmont K. Byrn, University of Michigan. National Vocational Guidance Association, Inc., 1605
New Hampshire Ave., N.W., Washington 9, D.C. Pp. 32. 30 cents.

Guidance for the Academically Talented Student. Edited by Elizabeth M. Drews, Michigan State University. N.E.A. Pp. 144. \$1.

(Continued on Page 166)

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Handbook of Policies and Procedures, 1960. Akron Public Schools, Akron, Ohio. Pp. 159.

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National Defense Language Institutes Program. Announcement of institutes for this summer and 1961-62 academic year. U.S. Govt. Prtg. Off. Pp. 14.

Two Faces of Federalism. Robert M. Hutchins, president, Fund for the Republic, Inc. Center for the Study of Democratic Institutions, Box 4068, Santa Barbara, Calif. Pp. 126. Free. (Continued on Page 168)



Mr. C. H. Pygman, Superintendent of Schools, and Mr. Joseph V. Lorenzo, Supervisor of Buildings and Grounds, District No. 89, Maywood, Illinois.

"Our Honeywell Maintenance Agreement protects all ten of our schools against unexpected repair bills"

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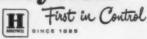
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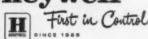
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Backfire? In a recent Teacher-fora-Day program at Glen Cove, N.Y., Stanley Lupinski, local police sergeant and traffic safety expert, taught high school students in five driver education courses. Learning that they received three or four hours of actual driving experience during the entire course, he said that they should have at least twenty and that driver education courses should be compulsory at the secondary level. Seventy parents in all participated in the program, among them by profession: a city court judge, a newly elected state supreme court justice, an airlines mechanic, a musician, housewives and businessmen.

program at Glen Cove, N.Y., y Lupinski, local police sergeant traffic safety expert, taught high students in five driver education as. Learning that they received

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4-8. Council for Exceptional Children, Detroit.

5-8. National Council of Teachers of Mathematics, Chicago.

11-15. National Art Education Association, Miami Beach.

16-22. National Library Week.

19-21. Southeastern Association of School Business Officials, Richmond, Va.

24-28. Department of Audio-Visual Instruction, N.E.A., Miami Beach.

MAY

21-24. National Congress of Parents and Teachers, Kansas City, Mo.

JUNE

14-18. American Driver Education Association, Miami Beach.

18-22. National Association of Student Councils, Oklahoma City.

25-30. National Education Association, Atlantic City.

JULY

30-Aug. 3. American School Food Service Association, Denver.

AUGUST

20-26. National Conference of Professors of Educational Administration, Berkeley, Calif.

SEPTEMBER

29-Oct. 4. Department of Rural Education, N.E.A., Pittsburgh.

NOVEMBER

22-25. National Council for the Social Studies, Chicago.

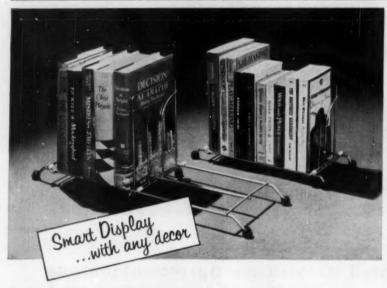
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24-28. National Association of Secondary School Principals, St. Louis.

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Holders are handcrafted in two practical

titles. Gentle pressure on lower portion of

uprights adjusts them to desired width for

stand upright without toppling when one

sizes that expand to display one or more selected

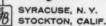
firm support. All size books slip in and out easily;

YEARS OF SERVICE

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Gaylord Bros., Inc.





△ WOODLAB

Biology Laboratory-Nassau Community College, Mineola, New York

Quality laboratories of lasting beauty

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Mineola, New York

For complete information, send for our 100-page catalog—59E

Physics and Chemistry Laboratory—Mather High School, Chicago, Illinois



seating problems solved ... in seconds!

WITH MODEL 2800 BENCH-TABLE

by **GOO**

The most versatile and economical seating unit, anywhere! Model 2800 combines convenience with long life to provide unheard of dollar savings for seating equipment of this kind. It converts in a flash—backrestbench to table-bench and back again—so safely even a child can do it.

Ideal for countless uses including cafeteria, auditorium, classroom and study hall. Use it as a sports scoring table, library book caddy, registration or work table, science room or examination table; for P.T.A. meetings or lecture seating. Among countless other advantages are:

2800 Cuts Conversion Costs—Easy folding and lifting action changes the 2800 from seat and backrest to table and bench. Top and bench flip to vertical position for movement and storage. There are no locks, latches or clips to pinch or catch. Conversion time: short seconds.

2800 Saves Space—Unit moves effortlessly and safely on 3" casters. Saves valuable space two ways. Fixed-dimension seating ends clutter and aisle confusion, seats more people in less space. When nested 2800 requires only 7" wide storage space per unit!

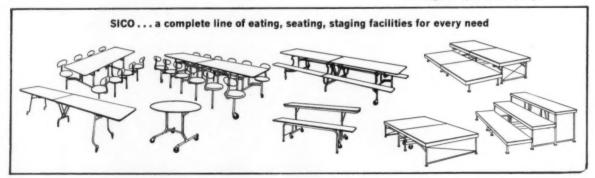
2800 Cuts Maintenance Costs—Built-in economy features include rugged unitized electric-arc welded 14 gauge steel frame. All metal parts are zinc lustron plated to end scratching and chipping. All pivot points are $\frac{3}{8}$ steel rod with self-locking fasteners. This unit is childproof!

Get complete information on the SICO Model 2800 or on the full line of SICO products. Write today:



SICO MANUFACTURING COMPANY, INC. 5215 Eden Avenue South

5215 Eden Avenue South Minneapolis 24, Minnesota, Dept. 203



Edited by BESSIE COVERT

TO HELP YOU get more information quickly on the new products described in this section, we have provided the convenient Readers Service Form on page 213. Check the numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. The NATION'S SCHOOLS will send your requests to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

Tape Storage Racks for Language Laboratories

The new RTP-560 library-type storage racks for language laboratories have a capacity of 560 tapes which can be interknobs to prevent damage to internal mechanism, and other exclusive features. Rheem Califone Corp., 1020 N. La Brea Ave., Hollywood 38, Calif.

For more details circle #167 on mailing card.



mixed in either five or seven-inch sizes. Color coded subject indexing and position-retaining clips eliminate misfiling, and all tapes are immediately available. Welded steel construction gives strength and rigidity to the racks which have a bakedon pearl gray enamel finish. Neumade Preducts Corp., 250 W. 57th St., New

For more details circle #166 on mailing card.

Didak 501

Is Automated Teaching Device

A "constructed answer" automated teaching device, Didak 501 motivates the student to deal with the subject matter presented in a step-by-step procedure and ensures his active participation in the learning process. It is designed to provide the experimenter or programmer with the variables necessary to teach and prepare material with maximum freedom from product limitation. Provision is made for the optional use of additional information or hints to ensure the correct answer if desired. The Didak 501 is housed in a high-impact, damage resistant steel and Royalite case and offers a "clue" shutter for prompts, reference card holder for external information, positive automatic



indexing of each teaching item, three teaching item aperture sizes for maximum flexibility in programming, separate paper transport and answer-space shutter con-trols, overload safety feature on drive

Increased Noise Control in Soundmaster Folding Partition

Sound insulating characteristics equal to those of a solid masonry wall are claimed for the new Soundmaster 240 folding partition. The steel-lined unit has twelve separate layers of material. Two of these are 24-gauge steel measuring 5% inches wide and extending the entire partition length on each side of each panel. All four horizontal edges are double insulated and four inner sealer strips of felt combine with four double-coated rubber and fabric seals to lock out sound. Foam rubber is used as an insulator where partitions join. The Soundmaster 240 can be used to partition almost any interior space and is available in single



partitions up to 25 feet high by 60 feet wide. Any number of partitions can be installed to accommodate any desired width. New Castle Products, Inc., New Castle, Ind. For more details circle #168 on mailing card.

Remote Radio Control System for Vega-Mike Wireless Microphone The Vega-Mike is a transistorized FM

wireless microphone system, designed for dependability and good performance with-out the inconvenience of an interconnecting cable. The Vega-Mike FM Transmitter is a completely self-contained miniature FM broadcast station, including transistors and battery, which affords com-pletely unrestricted mobility to speaker, coach, teacher or administrative officer. The reliable range of the system depends on the type of Vega antenna used, atmospheric conditions and local surroundings. The new Vegatrol radio-operated relay, developed for use with the Vega-Mike system, when connected to the receiver, provides instantaneous switching



of up to four other devices or circuits to clear for special announcements and the like. When the Vega-Mike microphone is turned on or off, other devices are controlled by the same switch. The Vegatrol



is a radio carrier-operated relay and is simple to install and operate. Vega Electronics Corp., 10781 N. Highway 9, Cupertino, Calif.

details circle #169 on mailing card.

In-Sight-Trol

Is Expandable Schedule Board

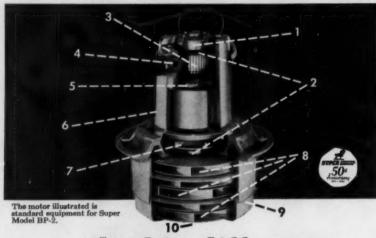
A new schedule board which can be used for programming teachers, pupils or curriculums is introduced by Game-Time. Called In-Sight-Trol (for Instant Sight Control), the board permits a printed and color-coded visual means of instantly giving a graphic summary of the entire school schedule. Modular and flexible in design, the new boards are adaptable to the needs of small or large school systems and are manufactured in sizes to accommodate 15, 30, 60 or 90-teacher schedules. A double aluminum track permits cards to be snapped into place and plastic overlays or special cards can be snapped into the second track without disturbing the basic schedule. Cards are color-coded and furnished in perforated sheets, pre-printed with all major courses, numbers, days and other information for a complete system. The lightweight aluminum construction permits moving the



boards to meeting rooms and they fit securely on wall brackets by means of a positive locking hook device. Game-Time, Inc., Litchfield, Mich.

For more details circle #170 on mailing card.

(Continued on page 172)



means much to buvers of vacuum cleaners!

The big difference between a Super Suction vacuum cleaner and all others is the electric motor—the heart of the vacuum cleaner. Each and every part of the specially designed Super Suction motor is manufactured in the Super factory. To our knowledge no other manufacturer of industrial vacuum cleaners can make this claim. A few buy the parts and assemble the motor. The others buy the same motors from the same motor manufacturer. You practically always get an identical motor regardless of which cleaner you choose.

The Super Suction motor is built to-and does-give you 20% more air at 20% more velocity with the standard 11/3 inch orifice. It permits the use of larger hose, more attachments and longer extension tubes. Works faster, more thorough. Lasts longer. Super cleaners, large and small, from the small-area, low priced units to the big volume, heavy duty Super Suction machines are equipped with a Super motor of a size to amply meet the job requirement. There is a Super to exactly fit your job and budget. There is a Super distributor near you. Let him show you "The Big Difference" or write for catalog and specification data.

only Super has it!

- Steel Bearing Housing . . . Bearing is housed in steel instead of aluminum motor frame. Housing ex-pands under heat at same rate as bearing, eliminating "play" around the bearing. If bearing falls, only housing eds replacing, not complete motor frame
- 2. Oversize Souled Bearings . . . Extra heavy duty bearing to stand up on continuous runs.
- 3. Commutator . . . Almost twice as much life, in-creases total life of motor.
- Carbon Brosh . . . Only two brushes required. Anyone can remove or replace. 2000 hours life, almost twice as much as others.
- 5. Field Coils . . . Protection wrapped, dipped and baked with insulating material. Others use no covering to protect wire.
- A Rigid One Piece Motor Frame . . . Guarantees alignment of armature and fan assembly from bearing to bearing, points of support.
- 7. Ventileting Fan . . . Better cooling system. Fan mounted in bottom of motor compartment pulls clean, dry air through channels directed over carbon brushes and commutator. Result is lower temperature rise, longer motor life.
- 8. Suction Fons . . . Almost twice as much blade depth and blade area allows air to pass with maximum efficiency without back pressure or turbulence.
- Fiberglas Fan Cases . . . Non-rusting non-cor-rosive, easily removed when necessary to service armature, Other motors use aluminum or steel which weld together under attack by cleaning solutions.
- Armeture Shoft . . . Larger diameter to with-stand heaviest torque load.

A few facts about "Suction" . . .

Static water lift as an indicator of suction is meaningless. At this closed orifice the machine is not moving any air-not doing any work. The Super Suction motor is designed to do more and better work at less labor cost on the cleaning job.



THE NATIONAL SUPER SERVICE COMPANY | 1956 N. 19th St., Toledo 2, Ohio

Speech Training and Correction With Monitor Dual-Channel Recorder

The Monitor dual-channel speech therapy unit is the result of two years of test-ing and cooperation with Dr. Richard Hendricks, speech pathologist. The specially designed tape recorder and a series of 31 remedial tapes permits pupils with speech problems to work daily, with supervision by a speech therapist at convenient intervals. Remedial tapes are prescribed for the particular problem, and

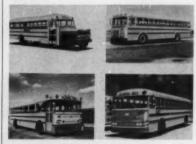


with their use, the therapist can concentrate on clinical aspects while routine drill and correction procedures are handled by the Monitor unit. The Monitor E-5 dualchannel tape recorder is ruggedly constructed, dependable and easy to operate with just two controls. It is available in a portable or a booth-mounted unit. Electronic Teaching Laboratories, Inc., 5034 Wisconsin Ave. N.W., Washington 16,

For more details circle #171 on mailing card.

Four Ward Buses in 1961 Line

New models in the 1961 Ward School Bus Line include the Ward Master, Ward Forward Control, the 79-passenger Ward Safeguard, and the all-new Ward Traveler, a deluxe pusher model for remote areas, special groups and the like. Features of the 1961 line include steel skeleton construction which combines onepiece bow with a rigid unitized floor assembly. Additional stability is provided by three heavy duty crash rails and a



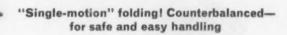
powerful grip rail which serves as a fourth longitudinal crash member. tional equipment new to the line includes fluted steel side panels for added strength and a scientifically designed driver's seat which is fully adjustable for height and position. Stronger seat tubing, new Posture Control seats, swept-back corner posts for improved windshield design with greater visibility and a totally new idea in the use of interior color are other features. Ward Body Works, Conway, Ark.

For more details circle #172 on mailing (Continued on page 176)

New improved design makes this Hamilton Erickson one-fold table the ...

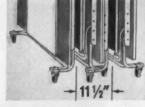
EASIEST OPERATING MOST COMPACT **PORTABLE TABLE** on the market today!





Genuine Formica plastic on all tops and benches!

Available in 6, 8, 10, and 12-foot lengths- with or without bench. You pay no more for Erickson's flexibilitycosts are proportionate to size.



STORES IN ONLY 11%" SPACE, center to center. Cuts storage space by 50%, permits use in limited floor areas. No exposed tubes, braces.



NO BRACES, NO STRUTS Full capacity seating in comfort. No straddling of braces, bars or struts at end or center of table.



NEW ADJUSTABLE TABLE Revolutionary new feature makes unit practical from elementary through high school levels. Simple adjustment made in critical elbow-seat area.



NEW UNITIZED FRAME gives extra strength and rigidity to table. Top and bench are solely use surfaces, they do not support unit.

Portable Tables

Wall Tables

Choral Risers

Stages

Tennis Tables

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Hamilton Manufacturing Company, Two Rivers, Wisconsin

new dimensions in time and space efficiency for: physicians; dentists; industrial, hospital, school laboratories; draftsmen; printers; libraries; home laundries.

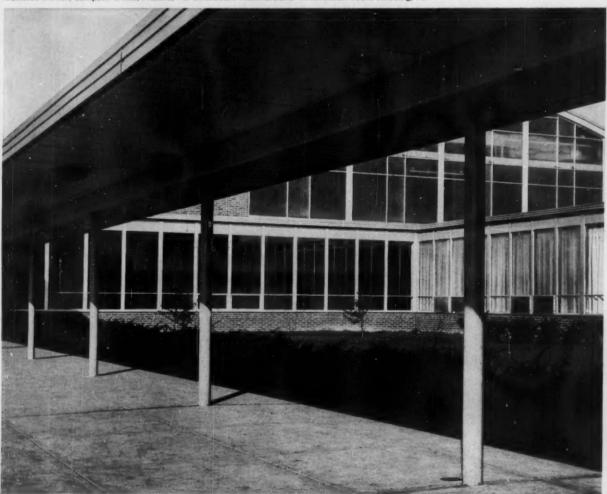


Polished Plate and PENNVERNON Window Glass by PPG assure plenty of light for Hartford Heights pupils.



More natural light for learning.

Hartford Heights Elementary School, North Huntingdon Township, Westmoreland County, Pa. Architect: Hunter, Campbell & Rea, Altoona, Pa. Contractor: Westmoreland Construction Co., Greensburg, Pa.



A liberal use of glass in connecting corridors makes moving from building to building a pleasure.



Over-all view of the Hartford Heights Elementary School showing how PPG products make it more beautiful.



. with Glass from PPG



Here at the Hartford Heights Elementary School in North Huntingdon Township, Pa., a liberal use of glass from PPG creates an atmosphere of lightness, brightness and beauty. In the education of hundreds of North Huntingdon children, PPG products play an important role. Because of PPG glass products, the entire school, from classrooms to corridors, is bright and well-lighted—with plenty of natural light that is so important in the learning environment. Classrooms are bright and cheerful, and the danger of eyestrain is reduced. Corridors, too, are well-lighted and airy, thanks to plenty of glass. Moving from building to building, it almost seems like the attractive courtyard is inside the building. Because of a liberal use of PPG glass products, it's a pleasure for the youngsters to attend the Hartford Heights Elementary School.

For more information on any of these PPG products, write Pittsburgh Plate Glass Company, Room 1146, 632 Fort Duquesne Boulevard, Pittsburgh 22, Pennsylvania.

PPG glass products for schools:

Solex® Plate Glass—green tint, heat-absorbing, glare-reducing glass

Solargray® Plate Glass—a neutral gray, heat-absorbing, glare-reducing glass

Pennyernon® Graylite™—a neutral gray, heat-absorbing, glare-reducing heavy sheet glass

Herculite®—shock-resisting tempered plate glass

Twindow®—the world's finest insulating glass

Polished Plate Glass—for clear, true vision

Pennyernon® Window Glass—window glass at its best

Spandrelite®—heat strengthened glass panels with color fused on the back



Pittsburgh Plate Glass Company

Paints . Glass . Chemicals . Fiber Glass

In Canada: Canadian Pittsburgh Industries Limited

Lots of glass here-functional, beautiful, modern.

Dodge Mobile Laboratory for Lab-Shop-Classroom TV

The Dodge Mobile Demonstration Laboratory features four desks for pupils, each with individual earphones, micro-



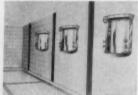
phone and tape recorder; a master control panel enabling the instructor to talk to one pupil or to the entire group; a work table, and a laboratory table. Floor to ceiling height is six feet, three inches, length is 20 feet and interior width is seven feet, two inches. Among standard equipment items are two swivel seats in the driving compartment; fully insulated floor, walls and ceiling; all-birch paneling; tinted safety glass front windows and other features. Dodge Div., Chrysler Motors, 7900 Joseph Campau, Detroit 31,

For more details circle #173 on mailing card.

Wall-Mounted Showers Are Economical and Self-Contained

Completely self-contained, the new Bradley semi-circular stainless steel wallmounted showers are available in two or

three-student models. They can be located on walls at any desired height and are only 38 inches long and 11 inches deep. Units include panel with cornice and cover, adjustable shower heads with hot and cold valves for each, control valves with interior piping, and soap trays. Installation costs are low and cleanliness and sanitation are achieved with mini-



mum maintenance. Bradley Washfountain Co., 2203 W. Michigan St., Milwaukee 3,

For more details circle #174 on mailing card.

Barber-Colman Thermostats Offered in Two Versions

Innovations in the line of Barber-Colman thermostats include improved operation with attractive appearance. Offered in two versions defined by electrical ratings, they are available for light and medium duty service. The thermostats are mounted on a sturdy Bakelite base enclosed by a die-cast cover frame with a textured metal face plate. Improvements include a sensitive bi-metal type thermometer and a round, easily read set-point dial with one degree graduations. Finishes include champagne gold or polished chrome covers. Barber-Colman, 1300 Rock St., Rockford, Ill.

For more details circle #175 on mailing card.

Magnetic Control Board Serves Many Purposes

Used as an aid in finding and equipping a school system with qualified teachers, the new Magnetic Control Board has instantly changeable magnetic devices which are visible for all to see. It is designed to save time and increase efficiency in handling records. The unit consists of



a magnetic steel board which holds firmly on its surface the visual elements required, which include a number of materials to meet whatever may be the need. In the case of teacher records, the large board has a space for each teacher in a system and the adjoining board holds the Magnetic Card Holders with a card for each teacher who has been hired but not placed. The system can also be used for student programming, plant layout planning, visual aids, control of supplies organization charts, among others. Methods Research Corp., Visual Control Sys-tems, 105 Willow, Staten Island 5, N.Y. For more details circle #176 on mailing card.

(Continued on page 178)



MINTOL disinfectant has a coefficient of 9. Diluted half a cup to the pail of water, it meets the new Use Dilution Confirmatory Test.

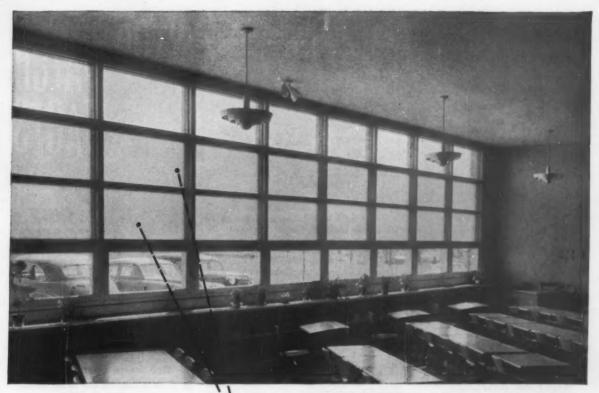
Kills bacteria. Mintol sanitizes the surface. Just dilute and apply with mop. Instead of a druggy odor you'll get that refreshingly modern mint fragrance.

Deodorizes. Add one-quarter cup of Mintol to your favorite cleaning solution and apply with mop. You will deodorize as you clean-do both jobs with the same swish of the mop.

For free sanitary survey of your premises ask your Dolge service man

For literature about MINTOL and other Dolge products write to The C. B. Dolge Company, Westport, Conn.





Farmdale Elementary School, Landisville, Pa. Architects: Coleman & Coleman, Glazier: Earl V. Schaffer, General Contractor: Rice & Weidman, Lancaster, Pa.

PUT COOLITE THERE TO STOP HEAT AND GLARE

Coolite Glass Installed In Center Sash Filters Harmful Qualities of "Raw Sunlight"

Coolite, Heat Absorbing and Glare Reducing Glass, installed in the two center lights of this school day-lighting wall keeps unwanted factors in "raw sunlight" on the absent list... floods classroom with softened, delicately tinted natural illumination... helps protect precious young eyes from dangerous fatigue, strain. Coolite helps keep classrooms cooler, too, since it absorbs over half of solar heat. Classrooms are bright as all outdoors, seem larger, friendlier... and Coolite-controlled light helps students feel and see better.

When you build or remodel your school buildings, take advantage of Mississippi's school daylighting knowledge which is supplemented by continuing research in a specially designed school room erected on factory grounds. Mississippi has a school-tested pattern for every requirement in line with your school building budget. Mississippl technicians recommend these outstanding patterns for school use: Coolite for maximum comfort; Pentecor, for maximum light distribution; Hylite, for maximum light transmission; Polished Misco Wire Glass, for maximum beauty with protection.

Write Dept. 15 today for free booklet, "Better Daylighting For Schools."

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WAYNE INDOOR SEATING SYSTEMS

work wonders on any school budget



Durable Wayne Model 30 felding bleacher. Economy sealing in the folding bleacher class.



Leader in luxury seating at a popular price. Wayne Medel 50 Rolling Gymstand.



Deluxe Medel 70 continuous rolling gymstand.



Only Wayne offers three basic types! More value, better engineering, finer performance in each . . from the world's largest manufacturer of spectator seating. Write for big, all new 1961 catalog today.

"Study in Steel" Conducted by U. S. Steel

A new program designed to develop new uses for steel is reported by the United States Steel Corporation with designs created by Peter Muller-Munk and Associates, industrial designers. Designs for everything from toys and furniture to



water towers and stadiums, with steel as the basic material, were developed. Of particular interest to schools is the design concept pictured as a possible arrangement for a library or records room with foam panel units hung from free standing structures, "T" legs as support units for furniture, and cantilevered steel chair seats, with tables equipped with integral lighting. United States Steel Corp., 525 William Penn Place, Pittsburgh 30, Pa. For more details circle #177 on mailing card.

Premiere Vina-Lux Flooring Has Fleecy Cloud Effect

A new manufacturing process makes possible a special pattern in vinyl asbestos tile. Developed by Azrock, the Premiere Series has a fleecy cloud effect which is distributed uniformly over the surface and throughout the full thickness of the tile. It comes in seven colors with tinted-white backgrounds, including two metallics. Azrock Floor Products Div., Uvalde Rock Asphalt Co., Box 531, San Antonio, Texas. For more details circle #178 on mailing card.

Modular Ad-Lab Adaptable to All Uses

Modular units with T-slot track top and bottom are quickly and securely fastened together to meet the specific needs of any laboratory experiment. The Ad-Lab pedestal base is the basic unit to which suitable A.C. or D.C. meters, voltage regulator, rechargeable nickel-cad-



mium battery pack, timer, and other components can be added as required. Adlab units can be safely stacked to use both vertical and horizontal space in storage, components can be purchased as required, and all parts are safe and easy to handle. With the components available, Ad-Lab is always up to date for use with all science courses. It is economical to install and encourages interest in students. Ariel Davis Mfg. Co., 1687 S. State, Salt Lake City, Utah.

r more details circle #179 on mailing card. (Continued on page 180)





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MEMORIALS • PORTRAIT TABLETS HONOR ROLLS • DONOR PLATES



ORNAMENTAL LIGHTING FIXTURES

in Wrought Iron,
Bronze
Aluminum,
Stainless Steel
produced to order.
ARCHITECTURAL
LETTERS
Illustrated Catalogs
& Estimates
sent on request.



Norman schoolroom package provides

INDIVIDUAL CLASSROOM HEATING AND VENTILATING SYSTEMS

for complete comfort at low cost!

No two classrooms in a school are exactly alike in heating and ventilating requirements during the school day, due to occupancy, activity, location and other variables. So Norman Schoolroom Package Systems were installed in St. Francis Xavier School to provide true comfort in each classroom. The result was a happy combination of gas-fired forced warm air efficiency and economical construction and operating costs.

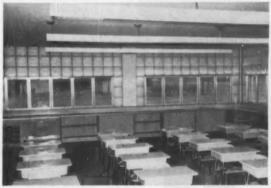
No separate building is needed to house a central heating plant. No tunnels or trenches for ducts or pipes. No unsightly chimney. Future expansion is simplified — just install additional Norman Systems as rooms are added. Other Norman gas-fired units are specifically designed for nonclassroom areas.



NORMAN ENGLOSED HVS compact horizontal unit illustrated with Util-i-Duct bookshelf sections



NORMAN INN-A-WAL counter flow furnace in separate heater room, illustrated with economical Wall-i-Duct sections



School: St. Francis Xavier High School, Sartell, Minn. Pastor: The Rev. Frank H. Ebner

Write today for comprehensive Manual on Norman HVS Horizontal or Inn-A-Wal Counter Flow Models.



Norman® PRODUCTS CO. 1162 Chesapeake Ave., Columbus 12, Ohio

what kind pot washer costs the most?



Obviously, the kind that stands on two feet and demands wages every week. The kind that costs the least is a Kewanee Pot 'n Pan Washing Unit that attaches to the side of any stainless steel or galvanized sink and converts it into an automatic washer. This compact Kewanee Unit-

- Pumps a 400 gal./min. live water torrent to eliminate 95% of pot washing drudgery. · Saves up to 50% on detergent and hot
- · Keeps soil in suspension to go down drain.
- Needs no plumbing . . . plugs into 110volt outlet.



KEWANEE POT 'N PAN ASHING UNIT

Kewanee DISHWASHER 802 Burlington Ave.

"Clearview" Science Table **Encourages Concentration**

A new principle of space arrangement for science laboratories is provided in the "Clearview" science table. It encourages



concentration, since no student sits directly opposite another, yet is equally effective for group activities. Student safety with a minimum of class distraction are provided with individual, comfortable laboratory work space for experiments, reference work and note taking. Complete service facilities with storage space are provided for each student. Where storage facilities are not required, pedestal-mounted tables are available. Suited to multi-purpose laboratory use, the design permits students to work sitting or standing. Laboratory Furniture Co., Inc., Old Country Rd., Mineola, N.Y. For more details circle #180 on mailing card.

Seco Line Tester For Fire Protection Systems



The Seco Line Tester is an approved method for easy, fast testing of fire protection sprinkler systems to determine the condition of branch lines. As a permanent installation, the line tester complies with approved maintenance procedure and permits regular checking without shutting down the system. Seco Mfg., Inc., 4461
W. Jefferson, Detroit 9, Mich.
For more details circle #181 on mailing card.

Streamlined Swivel Stools in Eleven Models

Sturdy construction, comfort and streamlined attractive styling are com-bined in the new line of eleven swivel stools for laboratories, home economics, drawing, drafting, shop and other classrooms, lunchrooms and other uses. choice of five finishes, in chrome or baked-



on enamel, with five seat upholstery colors, wire or upholstered backs or no backs is offered in the complete and versatile line. Durham Mfg. Corp., Muncie. Ind.

For more details circle #182 on mailing card. (Continued on page 182)

Published as a Public Service by Weber Costello Co.

Beware chalkboard maintenance

ANY chalkboard will give better, longer service if given proper care. For example, under no circumstances should oil or oily rags be used to clean chalkboards. Cleaners or chalkboard cloths impregnated with kerosene, caustic soda or any harsh chemicals should be avoided. Wash chalkboards only when necessary and then use clear water, rinse with clear water and dry thoroughly. Dry cleaning with an eraser followed by cleaning with a chamois or soft cloth is easiest and best-helps to prevent "chalkboard glare" and "gray effect"

Do not use crayons, or colored chalk not designed for chalkboards. Do not use cellulose tape to fasten papers to the board. (Never use fixative sprays, adhesives nor paints.) Be sure that erasers are cleaned regularly so that they actually erase instead of putting chalk dust back on the board. New chalkboard should be properly "broken-in". Use a good grade of chalk to assure more "mileage" and better erasing.

These and other helpful hints are contained in a booklet free to teachers, principals, custodians, school boards.



Send for your FREE copy, "The Care and Cleaning of Chalk-boards". Give name, boards". Give not school and address.

To Insure Top Perform-- Weber Costello Chalkboards, Chalks

Weber Costello Company CHICAGO HEIGHTS, ILLINOIS

Munufacturers of: CHALKBOARDS, CHALK, ERASERS, ART MATERIAL, MAPS, GLOBES. 1222 McKinley Street

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Similar non-master key lock, No. 30/1, available.

BUY NOW! TAKE TWO YEARS TO PAY!
Ordering now will help us deliver on schedule.
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help you build locker fund and assure proper
school security.

Write for sample, prices and 2 years credit plan.

C. L. GOUGLER KEYLESS LOCK CO.

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CONNOR'S "LAYTITE" EDGE GRAIN

UP TO 50% LESS EXPANSION IN THE USE OF EDGE GRAIN

(According to Forest Products Laboratory)

- USE "LAYTITE" EDGE GRAIN FOR:
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- * MORE YEARS OF HARD WEAR
- * LIGHTER AND MORE UNIFORM COLOR
- * LESS DIFFICULTY IN HUMID AREAS
- * AVOID BUCKLING AND WARPING

AVAILABLE IN REZILL-CUSH* SYSTEM -"CONTINUOUS STRIP" - REGULAR STRIP

See SWEET'S FILE Specs. #13J/CO.

CONNOR LUMBER AND LAND CO.

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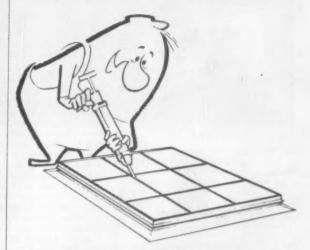
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PRC TOPLITE CONTROLS SUNLIGHT... PRC RUBBER CALK® **SEALS OUT WEATHER**



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PRC Toplite, the only roof panel with prismatic, hollow, evacuated glass blocks, controls sun glare and heat while reducing excessive brightness and apparent shadow. PRC Rubber Calk is applied during manufacture, sealing these panels against the most severe weather conditions. Maintenance-free performance and long life of Toplite panels is assured even under extreme temperature changes.

In addition to Rubber Calk, PRC also manufactures other quality calking compounds, as well as glazing and coating products for the construction industry. Please fill in the coupon below for colorful, descriptive catalog. Complete sales and manufacturing facilities on both East and West Coasts.

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NAME OF COMPANY _

NAME

ADDRESS

STATE

PRODUCTS RESEARCH COMPANY 2919 Empire Avenue, Burbank, California

Series 7700 Overhead Projector Has Large-Class Capacity

The brilliance and power of larger units, with capacity for large classrooms or meeting rooms, are built into the new Master Vu-Graph 7700. The versatile in-strument has a shorter supporting post and compact projection head, giving it a low profile which virtually eliminates all obstruction to eye contact between audience and instructor. In spite of its compactness, the projection stage accepts full 10 by 10-inch transparencies and projects a brilliant 1000-watt full color image be-



hind the speaker to sizes as large as 13 by 13-feet. Charles Beseler Co., 219 S. 18th St., East Orange, N.J.

For more details circle #183 on mailing card.

Hi-Lo Water Cooler

Features Two Drinking Levels
The Hi-Lo Drinking Fountain combines an off-the-floor compact cooler with a low level attachment to provide drinking facilities for both adults and children. All

plumbing and electrical connections are entirely concealed within the cooler and the smooth contours of the stainless steel tops prevent splashing and are easily



cleaned. Haws Drinking Faucet Co., 4th and Page Sts., Berkeley 10, Calif.
For more details circle #184 on mailing card.

Cenco-Miller Devices

Help in Teaching Physics Two new laboratory demonstration pieces, suggested by an instructor to help teach physics students about changes created by thermal energy, are added to the Cenco line. One of the devices demonstrates the forces involved in thermal expansion and contraction, while the other shows the effects of temperature change on the resistance of conductors. Two other Cenco-Miller devices, also developed by Julius Sumner Miller of El Camino College, California, demonstrate rotational forces. Central Scientific Co., 1700 Irving Park Rd., Chicago 13.

r more details circle #185 on mailing card.

Campbell Chili Con Carne Now in Institutional Size

Fifty-two ounce cans of Campbell's Chili Con Carne With Beans are now available for institutional use. The new size is introduced to permit quantity production for servings in school cafeterias and other institutions. Campbell Soup Co., Camden, N.J.

For more details circle #186 on mailing card.

Speedline Revolving File **Expands With Need**



Expandable up to six times original capacity in the same floor space, the new Wassell Speedline Work Organizer file is based on the principle of the horizontal wheel or Roto-Tier. Folders are filed radially, around the hub, and finger pressure brings the desired file into view. The Roto-Tiers can be expanded as the need increases. Wassell Organization Inc., 225 State St. W., Westport, Conn.
For more details circle #187 on mailing
(Continued on page 184)

wood storage shelving





Standard set-up time with inexperienced two man team. Shelves installed in 6 seconds.



PREFABRICATED **ADJUSTABLE** WOOD SHELVING





VERSATILE: Store anything . . . cartons, linen, utensils, glassware, busi-

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EXPANDABLE:

Erect as individual units, in runs, islands or back to back for storage in depth.

ness forms and equipment of various sizes and shapes.

- ADJUSTABLE:

Reposition shelves in 15 seconds. Dismontle LUNDIA and relocate without nuts, bolts, fasteners or special tools. manufactured by: LUNDIA, SWAIN and MYERS, INC. / write for prices

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NOW'S THE TIME TO HAVE JOHNSON CHECK YOUR TEMPERATURE CONTROL SYSTEM

Keeping your Johnson Control System at top efficiency may easily save you hundreds of dollars in the months ahead. A check-up this summer by a Johnson factory-trained service mechanic will pay large dividends in uniform comfort and maximum fuel savings.

The very nominal cost includes a thorough inspection and adjustment, as necessary, of all thermostats, valves, damper operators, and other control equipment. No repairs or replacements are made without your prior approval.

Be ready for the youngsters when they return . . . with properly heated and ventilated classrooms for the crisp, chilly days of fall and winter. Call or write your local Johnson branch office, or mail the coupon, to have your school put on the Johnson Summer Service Schedule.



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DESIGN . MANUFACTURE . INSTALLATION . SINCE 1885

JOHNSON SERVICE COMPANY Milwaukee 1, Wisconsin

Please have your nearest office supply me with information about your Summer Service Schedule.

Name
Title
School or Organization
Address

Vol. 67, No. 4, April 1961

For additional information, use postcard facing back cover.

City...

NEW high-speed vacuum cuts labor with faster, cleaner WET or DRY PICKUP



Cleans up to 25,000 sq. ft. per hour!

Here's a real labor saver for many floor maintenance jobs-just one pass with the new Air-Scoop leaves a sparkling clean, dry floor. Roll the Air-Scoop along and watch it gobble up muddy scrub water or dry dirt, grit and dust. The 28" double-bladed squeegee with triple-turbine powered suction picks up everything. Automatic floor pressure adjustment feature keeps squeegee snug on any surface. Complete units are offered in 12 and 16 gallon models.

- e Cleans up to 25,000 sq. ft. per hour—wet or dry.
- Available with 12 or 16 gal-ion tank in stainless steel or with baked enamel finish.
- Bypas motor is moisture-proof and dust-proof, rated for continuous duty.

 Con be used as standard portable vac with Snap-on Quick-Coupler tools.
- Vacuum develops up to 78" water lift.





I dries a 28" swath on each pass uble-bladed straight squeegee as 50% more effectively than V-



Write today for complete information

ADVANCE FLOOR MACHINE CO. 109 Industrial Center

SPRING PARK, MINNESOTA

"Electro-Stat" Desk-Top Copier Copies All Materials at Low Cost

The result of more than four years of research and development work, the new Apeco "Electro-Stat" is a compact, desk-Apeco Electro-stat is a compact, desk-top copier using an electrophotographic technic. No liquids are used in the com-pletely automatic unit which produces black on white copies with unusual clar-ity and fidelity of any written, printed,



typed, drawn or photographed material at a cost of less than 3½ cents each. It reproduces half-tones and solids with tones and color gradations appearing as corresponding shades of gray. Modular construction permits quick service, and individual components may be removed and replaced without dismantling the machine. American Photocopy Equipment Co., 2100 W. Dempster St., Evanston, Ill.
For more details circle #188 on mailing card.

3M Brand Wallboard Adhesive Holds on Variety of Wall Surfaces

A mastic-type rubber base adhesive with high initial wet strength before drying is offered in the new 3M Brand Wallboard Adhesive. The fast drying, water resistant adhesive is developed for installing hardboard or wallboard to existing plaster, plasterboard, wood, concrete or other sound smooth wall surfaces. Its paste-type consistency fills and levels slight irregularities to ensure complete contact. Minnesota Mining & Mfg. Co., 900 Bush Ave., St. Paul 6. Minn.

For more details circle #189 on mailing card.

Light-Gauge Guardrail For Off-Highway Use

Econobeam, a new light-gauge guardrail for parking lots and similar low-im-



pact applications, is made of 16-gauge steel, galvanized on both sides for weather protection without the need for painting. Supplied in 121/2 or 25-foot lengths, the sections are fastened with a single bolt to any timber, concrete or steel post. Armco Drainage & Metal Products, Inc., 9361 Curtis St., Middletown, Ohio.

For more details circle #190 on mailing card.

(Continued on page 186)





"zakseler letyd de lärg" * SAYS DICTALAB

The student in our picture is mastering French via Dictalab, a new electronic tape-teaching system that feeds pre-recorded lessons to students in individual sound-proofed booths.

With Dictalab, students hear language spoken correctly, as the teacher recorded it. There are few distractions in the sound-proofed booths. Instruction is continuous, intensive. The teacher can monitor any student from the master console at a flick of a switch, or speak directly to him.

The student learns to speak a language accurately, at an accelerated rate. He is encouraged by his success to learn how to read and write as well as he has learned to speak.

Your school can begin its Dictalab system with a basic installation, and add to it as the need grows. With Dictalab, you get more than the finest equipment. You are assured of prompt, skilled service by Dictaphone Corporation's own staff of factory-

trained servicemen, the largest in the field.

Dictalab can be used to accelerate teaching of many subjects. Rooms equipped with Dictalab can also be used by classes taught by standard methods.

Fill out and mail the attached coupon for an interesting, informative report.

(*"J'accélère l'étude des langues," printed in International Phonetics)

REG. U.S. PAT	one CORPORATION
	report on your new system for language
NAME	
ADDRESS	

Language Lab Pronunciator Is Audio-Active Device



The Pronunciator is a new device providing audio-active listen and respond instruction, using records, to aid in the teaching of languages. High fidelity boom microphone and earphones provide excellent quality to help the student in accu-

rately repeating words or phrases. With the machine, individual students can progress at their maximum speed and capacity. The device is relatively inexpensive and is simple to use and maintain. Newcomb Audio Products Co., 6824 Lexing-ton Ave., Hollywood 38, Calif.

For more details circle #191 on mailing card.

Quick-Change Audio-Drills Speed Language Accuracy

Fluency and accuracy are speeded in language studies with the new MRI/TRW Quick-Change Audio-Drills. The new drills are available in fundamental French, Spanish and German and provide a supplement for easy use by teachers with any and all textbooks at home and in class,

with or without a language lab. The drills provide self-correction, permit more practice in less time, and give additional practice in less time, and give additional practice in aural comprehension, pronunciation and intonation. Each drill comprises 18 twelve-inch records and a teacher's manual. Educational Electronics Div., Thompson Ramo Wooldridge Inc., Englewood Cliffs, N.J.

For more details circle #192 on mailing card.

Sit-Down Table for Overhead Projector Use

A new portable projector table, designed to be rolled up to the side of the teacher's desk, permits use of overhead



projectors in a seated position. The writing table of the projector is at desk-top height for comfortable seated use and easy reference to notes and teaching ma-terials. Model W 16 is of sturdy, all-steel welded construction, finished in enamel. The 18 by 24-inch shelf has a double-thick foam rubber pad, and four-inch ball bearing casters assure easy rolling in any direction. H. Wilson Co., 106 Wilson St., Park Forest, Ill.

For more details circle #193 on mailing card.

Low-Cost Mark II Autotutor Is Simplified Teaching Machine

Simplified design and operation and low cost are features of the Mark II Autotutor, a new desk-top teaching ma-chine. It has a high contrast rear projection lenscreen employing 35mm single frame black and white or color film and simplified top deck loading. In operation, the student sees a paragraph of information on the screen with a multiple-choice



question. He presses one of the lettered buttons to indicate his answer. If he has chosen wrong, the Mark II presents a correctional paragraph and the instruction to press the return button, which brings back the original question. When he chooses the correct answer, the next paragraph of information and the next question appear. Students can test themselves without supervision and can proceed according to their abilities. Western Design Div., U.S. Industries, Inc., Airport Bldg. 115, Goleta, Calif.

details circle #194 on mailing card. (Continued on page 188)



Acme Visible Flexoline Indexes Make Student Facts Easy To Find

School's packed-classes humming-but who's who and where? There's an inexpensive way to find out as quick as a glance. Acme Visible Flexoline indexes give you fingertip control of the complete student enrollment-serve as a cross index to home room or class.

There are no cards to re-shuffle- no lists to re-type to keep reference day-to-day perfect. Minimum school office personnel easily handles these portable units with capacities of 350 to 25,000 names.

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Gymnasium of Mountlake Terrace High School, near Seattle, Washington. Architect: Ralph H. Burkhard, Seattle.
Engineers: Anderson, Bjornstad & Kane, Seattle, Contractor: Brazier Construction Company, Seattle.

Space provided: full size basketball court with seating for 2500 spectators. Roof framing: 125-foot Triax dome by Timber Structures, Inc., with dome segments of glulam timber. Exterior walls: tilt-up concrete panels with exposed crushed marble aggregate; glass panels set in aluminum frames. Interior walls: painted concrete and glass. Heating: peripheral hot air circulating system with ducts below floor level. Ventilation: mechanical and natural systems. Lighting: mercury vapor fixtures; Everlite skylights. Floor: maple over criss cross spring system. Roof surface: 20-year bonded glass type over heavy timber decking; ceiling of sprayed asbestos fibre. Area: 12,272 square feet. Volume: 307,000 cubic feet. Cost: \$11.50 a square foot including architect's fee and sales tax. Dome structure \$1.72 a square foot, erected in place.

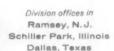


PHOTOGRAPH COURTESY OF ALSYNITE

Timber Structures, Inc., with thirty-two years of experience in timber laminating and fabricating, assisted the architect in providing this attractive, permanent structure for \$35,000 less than the cost of equal space provided by conventional construction. Thorough quality control assures lasting beauty and maintenance-free service of the dome structure.

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P.O. Box 3782, Portland 8, Oregon



District Representatives in Major Cities Throughout the United States

> Member A.I.T.C. and Producers' Council

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\$59.50

ATC 300C

THE MOST POPULAR 4-SPEED CLASSROOM RECORD PLAYER

The 300C utilizes proven teaching features and eliminates useless consumer frills.

10 watt Hi-Fi amplifier, transformer powered for complete safety.

9" oval speaker with coaxial tweeter cone. Standard output jack for headsets.

Automatic turntable release.

Ample space for AC cord storage.

Phono needle protected from hitting knobs, motorboard or side of case.

Scuff resistant fabricoid covered

%" plywood case, metal corners and knees, solid hard plastic handle.

Spring cushioned plastic feet.

Carrying weight only 17 lbs.

ATC 300C, \$59.50 School Net, \$89.25 List ATC 300 VC, with variable speed turntable, \$74.50 School Net, \$111.75 List.

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Menger CHORUS RISERS FOR STANDING or SEATED CHORUS



COMPLETELY PORTABLE . . . Easy to Set up — Move — Store Designed for maximum proficiency — Greatest safety — Visible control — Your Group looks better — Sings better — Sounds better on a WENGER RISER.



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Splinter-proofed Edges

Tornado 280 Floor Machine Has Smooth One-Hand Operation

Featuring perfect balance due to weight and movement over the exact center of the machine, the new Tornado 280 floor machine provides completely smooth, one-hand operation with no vibration or bucking. The 280 operates at a continuous 25 per cent overload without danger of overheating, has low operating amperage per horsepower, non-loosening handle height adjustment, recessed switch levers and heavy three-wire safety cable with third wire grounding. Breuer Electric Mfg. Co., 5100 N. Ravenswood Ave., Chicago 40.
For more details circle #195 on mailing card.

Compact Kit

For Replacing Faucet Seats

Thirty-five different types and sizes of Removable Full-Saddle Seats are available



in the new Sexauer No. 24-B Handy Andy kit for replacing worn, pitted, water cut or corroded removable faucet seats. The handy metal kit contains 100 assorted seats, three different sizes of wrenches, and a gauge providing 33 tappings for determining the exact type and size seat needed. The handly metal carrying case is divided into 20 tills, has a locking cover. J. A. Sexauer Mfg. Co., Inc., 2503 Third Ave., New York 51.

For more details circle #196 on mailing card.

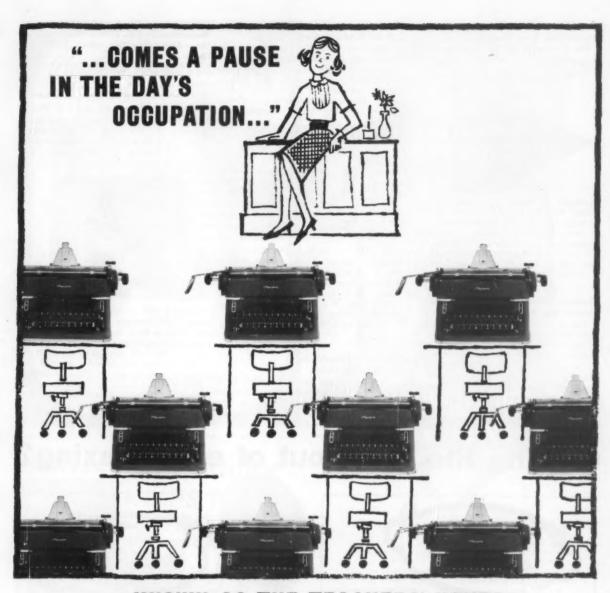
Web-Foot Mop Line Now Offered in Six Weights

The patented Web-Foot line of mops is expanded to include eight, 12, 16, 20, 24 and 32-ounce weights to handle almost any mopping need. Other new features included in the line are a heavy duty, herring bone weave, selvage edge, cotton control band nylon-stitched to the mop tip, and an optional four or six-inch



header. The Web-Foot patented mop design features a control band stitched to the lower portion of the mop to hold the yarn firmly in a perfect mopping pattern without tangling, raveling or wrapping around the mop handle or around furniture. The special yarn absorbs a maximum amount of water and, with the Web-Foot control, mops can be washed in machines. South Eastern Cordage, 815 Superior Ave., Cleveland 14, Ohio.

For more details circle #197 on mailing card. (Continued on page 190)



...KNOWN AS THE TEACHERS' HOUR!

A time to relax-a time to reflect! Are the fledglings progressing? How's their technique...speed-stance-stroke? It's satisfying to be a perfectionist...and to help develop this in other minds and hands. Credit, too for the precision-built Olympia Typewriters...serving as partners in perfection.

These superb typewriters come fully-equipped with the finest, most advanced typing aids...from exclusive spring-cushioned keytops to convenient half-spacing. Features that are easier to teach with...to learn on!

Important, too, is Olympia's reputation for easy, quiet, trouble-free performance, year after year...cutting maintenance costs to an absolute minimum.

Olympia
"Writes best of Vall-because it's built best of all!"

No wonder more and more schools, from coast to coast, are selecting Olympia. Why not put one to the test yourself—before you decide on any other typewriter!

OLYMPIA DIVISION NC Inter-Continental Trading Corp. 90 West Street, New York 6, New York Please send me a copy of Alan C. Lloyd's ALAN C. LLOYD'S articles ... "The Typing Teacher As A "The Typing Technician"... to the address below. Teacher As A Technician" Name. an informative series of articles on the development, Address etection, City Zone State

Elementary Science Microscope Permits Fast Basic Training

The Elementary Science Microscope is an easy to operate, full-sized instrument



developed to enable the young science student to learn the fundamentals of microscopy quickly and to prepare for use of more advanced equipment. Ruggedly constructed, the instrument contains 40x and 100x magnifications. Bausch & Lomb Inc., 645 St. Paul St., Rochester 2, N. Y. For more details circle #198 on mailing card.

Markable-Kleenable Map Shows Changes In Africa

The new Markable-Kleenable map features the many changes in the map of Africa, with arrows in the side margins pointing to the names and locations of the new nations. The full-color map measures 34 by 22 inches and is designed to stand on a desk or a chalk rail. It can be marked with crayons and cleaned by wiping. The George F. Cram Co., Inc., 730 E. Washington St., Indianapolis 6, Ind. For more details circle #199 on mailing card.

Mobile Science Laboratory Is Fully Plastic Surfaced

Completely surfaced on the interior and exterior with Nevamar high pressure plastic laminate which will not craze, crack or peel in normal use, the new Mobile Science Laboratory Unit is easily maintained. The completely sealed Nevamar top has two drop leaves, extending the



work surface to six feet. The unit is fully equipped for classroom demonstrations and is offered with a choice of sliding doors or two full hinged doors for the storage base. Large swivel-type locking casters make it readily mobile. National School Furniture Co., Odenton, Md.

For more details circle #200 on mailing card.

Melamine Dinnerware Has Cups to Match

Decorated cups are now available to match the four melamine dinnerware patterns in the Regal Decorated line. The dinnerware is safe in dishwashers or scalding water as the patterns are molded in and cannot fade or wear away. Plastics Manufacturing Co., 2700 S. Westmoreland Ave. Post Office Box 13645, Dallas 33, Texas.

For more details circle #201 on mailing card.

SPI 1801 Professional-Type Microscope Designed for Classroom and Lab Work

Specifically designed for school science teaching, the SPI 1801 is a professionaltype, low cost microscope constructed to withstand continuous student use in the classroom and laboratory. The unit is



equipped with an adjustable stop to prevent slide breakage and the ten power eyepiece is fixed by a set screw to discourage tampering. Among the other features of the 1801 are a study arm that ensures balance and stability, an acid and reagent resistant square stage, a built-in condenser lens, and a quadruple nosepiece. Southern Precision Instrument Co., 710 Augusta, San Antonio, Texas.

r more details circle #202 on mailing card. (Continued on page 192)

Getting the most out of each waxing?



He's mad-has to wax again



He's glad-dry-cleans with Brillo Floor Pads

... dry-clean the shine back into your floors

Fresh wax forms a transparent film to protect your floors from wear. Regular once-overs with a Brillo Steel Wool Floor Pad removes the dirt and rehardens the wax... makes each waxing last twice as long.

You save extra work because this regular "dry cleaning" with Brillo eliminates the extra scrubbing and waxing

that is needed when you strip too often.

There's a Brillo Solid Disc Steel Wool Floor Pad for every job . . . scrubbing, dry-cleaning or buffing. Send for free instructive folder today.

To strip floors completely
Use BRILLO Syndisc®
REVERSIBLE FLOOR PADS

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ONE 6.6 hp. Gravely Tractor powers 30 tools!

Choose the tools to fit your jobs—any season. From mowing to snow removal, the Gravely Tractor keeps busy saving time, saving money, year after year.

GET THE FACTS-SEE THE PROOF! See Gravely actually solving grounds maintenance problems, saving money.
Ask for your FREE copy of "How To Cut Costs for Grounds Maintenance." Or better still, request a FREE demonstration. Write Now!

GRAVELY TRACTORS

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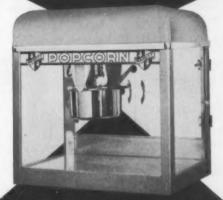
Dunbar, W. Va.

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If your school has 30 x 20" table space ... and the desire to finance 'extras" for students

Join those* making 75% gross profit



with the NEW, BUDGET PRICED MANLEY JEWEL

Popcorn Machine



Band uniforms, sports equipment, hi-fis and phonographs, mo-

tion picture screens and projectors—these are but a few of many "extras" schools are buying with profits from Manley Jewels. This counter-size, budget-priced machine costs less than half regular floor-sized models, operates on a normal 115-volt circuit. Its well-lighted glass-enclosed case helps boost sales; the heated cabinet floor keeps popcorn hot; and the entire popping operation requires just four simple steps.

Any student can operate it after a few minutes of instruction

from the sales representative.

Because fresh, hot, healthful popcorn finds eager patrons at virtually every school event-from athletic games to class parties and teen-towns-the Jewel soon pays for itself and profits mount up fast.

To get full information on the new Manley Jewel-use the handy coupon provided below.

*Hundreds of schools across the nation. Names on request,



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	Please ser	d me, w	ithout obl	igation	or charge
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Automatic Scrubber is Self-propelled



Self-propelled, with no cords, fumes or odors, the new battery powered Auto-Scrubber Model 721-B features a rugged frame and case, large water capacity and

full floating brush and squeegee. It is easily maneuvered and will turn in its own length. The cleaning solution is metered for economic and thorough cleaning. Lincoln Floor Machinery Co., 518 S. St. Clair St., Toledo 3, Ohio.

e details circle #203 on mailing card.

A-3-P Planetarium **Shows Night Skies**

The A-3-P Planetarium is a convenient, practical, reliable device to assist in the teaching of the earth-space sciences, and is designed to give years of trouble-free performance. It permits students to view the sky as it might appear from any place on earth at any time, past, present or fu-ture. With the new instrument it is pos-

sible to show within minutes motions that take years of natural observation. A special adjunct of the instrument is an automatic planetary motion device that simulates the motions of sun, moon and the five planets visible to the naked eye. The mechanisms which group these parts on the same plane in the instrument provide centralized power supply, reduced struc-tural deflection and simplified planet setting. Spitz Laboratories, Yorklyn, Del. For more details circle #204 on mailing card.

Mobile Lab Table Is Practical and Functional



The KTF-112 mobile Science Demonstration Table is sturdily constructed of oak in a chemical resistant natural finish. Four four-inch swivel type casters, two provided with brakes, make the unit readily mobile for demonstrations in classrooms and other areas. The green plastic top is resistant to chemicals and has a stainless steel cup sink, water pump and two flush plates for rod set-up. The recessed pegboard back provides facilities for hanging rods, glassware and tools. Double doors open on the cupboard area with storage space for bulky items, three stacked tote trays and two one-gallon polyethylene waste and water carboys. Kewaunee Technical Furniture Co., 3004 W. Front St., Statesville, N.C.
For more details circle #205 on mailing card.

"Easy Push" Lavatory Fittings Save in Water Consumption

The "Easy Push" self-closing, metering lavatory combination fitting introduces a new idea in the line. Operated merely by



depressing a lever-type handle gently with the fingertip, the fitting is equipped with adjustable self-closing valves that reduce water consumption up to 25 per cent and a metering device supplies a regulated flow of tempered water. It has a selfcleaning bypass, and non-dripping, non-hammering, splashproof and vandalproof features which make it especially suitable for use in schools and other institutions. Speakman Co., 30th & Spruce Sts., Wilmington 99, Del.

etails circle #206 on mailing card. (Continued on page 194)



schoolco

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2 Ideal specifications for efficient CLASSROOM DOOR CONTROL





These ideal GJ specifications for classroom doors are used in such outstanding schools as:

Chicago Public Schools, Chicago, Illinois

John Muir Jr. High School, San Leandro, California. Schmidts, Hartman and Wong, Berkeley, Calif. — architects

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Wellesley Senior High School Addition, Wellesley, Mass. Perry Staw Hepburn & Dean, Boston, Mass. — architects

Also GJ shock absorbing door holders for entrance and other heavy duty doors.

"shall have GLYNN-JOHNSON . . .

GJ 500 series CONCEALED (or surface mounted) OVERHEAD DOOR HOLDERS." (Most efficient shock absorbing device for holding door open at any specified degree up to 110°. Resilient spring cushion absorbs force of violent openings. Holds door conveniently open for continuous "through" traffic. Overhead, they present no stumbling hazard, are tamper-proof and cannot interfere with cleaning.)

"GJ F 40 FLOOR TYPE (or GJ W 40 wall mounted) COMBINATION DOOR STOP AND HOLDER." (This simple, foolproof device engages silently and automatically to hold door open. Releases with a firm pull. Rounded surfaces prevent children from "riding" bumper or damaging floor plate. Especially recommended for doors opening more than 110°.)

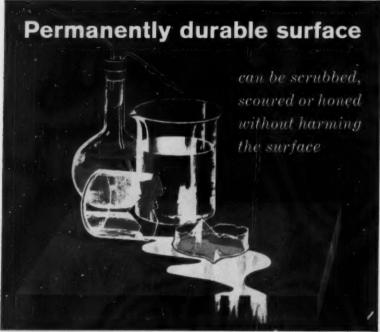
"THREE GJ 64 for metal frame (or GJ 65 for wood frame) RUBBER SILENCERS." (Form pneumatic air pockets to absorb shock or noise of closing and create constant latch tension . . . no door rattling.)

write for SCHOOL DOOR CONTROL brochure B-9/GL

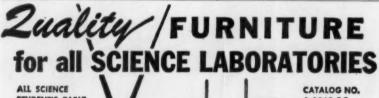
GLYNN-JOHNSON CORPORATION

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ALBERENE STONE—for 75 years the only permanently satisfactory material for chemical laboratory table tops, shelving, sinks, splash backs, drain boards and fume hoods. Prompt delivery. For FREE literature and technical assistance address: ALBERENE STONE (A DIVISION OF THE GEORGIA MARBLE COMPANY) 386 PARK AVENUE SOUTH, NEW YORK 16, N. Y., DEPT. S





These new perimeter type tables offer unlimited design possibilities and arrangements from standard interchangeable base units. They provide numerous advantages for new construction design as well as for use in remodeling for Chemistry, Physics, Biology and General Science laboratories. Our representative engineer will be pleased to discuss your requirements and show you the entire line of Peterson furniture that has been the choice of leading educators and industrial furniture users for more than 65 years.

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Cleartype Desk Outline Maps Feature Easy Reading

Featuring clear, bold lines for easy reading, the Cleartype Desk Outline Maps, printed on sturdy white bond paper, are current, accurate and low in cost. Maps of individual states of the U.S. illustrate state and county boundaries only and are 8½ by 11 inches. Maps of entire countries, continents and the world show choices of outline only, outlines plus boundaries, outlines with boundaries and rivers, and outlines with boundaries, rivers and mountains. In addition to the 8½ by 11 inch size, they are also available in 11 by 16 and 17 by 22 inches. American Map Co., 3 W. 61st St., New

For more details circle #207 on mailing card.

Starline and Guardian **Bus Body Styles**

Improved design to increase safety, heighten durability and extend comfort is built into the new 1961 deluxe Starline and Guardian bus body styles. The basic difference between the two lines is the inclusion of extra features on the Starline. Both bodies have four protective roof beams extending the length of the bus, a



skin-stressed roof, a "hi-arch" ceiling, heavy duty 16-gauge steel side panels, a double reinforced rear structure and extra strong rear bumpers. An extra large unitized "rub rail" links the "hi-arch" roof to the side frame. For added strength and safety, the rear of the bus bodies has and safety, the rear of the bus bodies and as a battery of flush-mounted lights and an illuminated "School Bus" sign is mounted on the Starline. Oneida Div., Marmon-Herrington Co., Inc., 1511 W. Washington St., Indianapolis 7, Ind.

For more details circle #208 on mailing card.

Folding Leg Utility Tables Stack for Storage

The new Rol-Fol folding-leg, Formicatop utility table features a steel channel



uniframe with sockets which anchor the legs when opened, eliminating the need for bracing and providing fuller seating capacity. The legs fold completely into the uniframe channel for flat stacking in storage. The table is available in a variety of shapes and sizes. Rol-Fol Sales Co., 8467 Melrose Pl., Los Angeles 46, Calif.



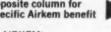
Every School needs the Airkem Program **Environmental** Health!

Everybody benefits! Children "do better in school." Illness drops, attendance climbs. Teachers, parents and visitors notice a big difference when you put the Airkem program to work and bring a clean, odorless, agreeable and healthful new "climate" into the school.

The Airkem program gets to the heart of the problem. It thoroughly cleans all surfaces. It kills germs and other microorganisms. It kills insects. It kills odors by counteracting them. And it gives an airfreshened effect without adding obnoxious perfumes or chemical smells. It is the only complete program of basic sanitation maintenance.

There's no mystery about it! All you do is make sure the proper Airkem product is used in its proper place in the school. Procedures are simple-and they actually save money and time by combining several housekeeping jobs in one, freeing your maintenance staff for other work. Inquire!

See opposite column for one specific Airkem benefit





AIRKEM' For a Healthier **Environment through** Modern Chemistry

Central Air Conditioning Has Complete Set of Filters

A complete selection of both unit and automatic air filters is available as preselected and matched components in the new line of packaged central station air conditioning units introduced by American Air Filter. The Kennard/Nelson Air Conditioning units are engineered to meet exacting conditions of air quantities, temperatures and humidities and, in the same package, to provide any degree of air cleaning. Unit construction features incorporated into the basic unit design include a Penta-Post frame, five-angle corner post, all welded construction of heavy gauge steel for maximum strength with minimum weight, double drain pan with one-inch insulation, and insulated panels with quick opening access doors. The new line is available in both horizontal and vertical models in 14 basic sizes with 24 different arrangements per size. American Air Filter Co., Inc., Dept. PD, 215 Central Ave., Louisville 8, Ky.
For more details circle #210 on mailing card.

Kitchen Unit Performs Four Ways

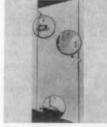


The new 4 Way Cooker Model #1848-BR combines frying, cooking, grilling and broiling in one stainless steel unit, featuring the Golden Fryer which responds instantly to the slightest temperature change, keeping fat at correct cooking heat. Easy to clean and simple to operate, the unit has a single gas supply for all four cooking functions. Cecilware-Commodore Products Corp., 43-05 20th Ave., Long Island City 5, N. Y.

For more details circle #211 on mailing card.

Improved Toilet Partitions Are Quickly Installed

Equipped with integral hinge brackets, flush bottom hinge and a handle which operates with smooth cam action, the new Sanymetal toilet partitions simplify main-



tenance and reduce tampering and vandalism. Elimination of brackets, bolts and screws gives the partitions a clean, attractive appearance and installation time is reduced to a minimum. Sanymetal Products, Inc., 1697 Urbana Road, Cleveland 12, Ohio.

ere details circle #212 on mailing card. (Continued on page 196)

Excuse for Health Hazards in Kitchen or Cafeteria

Foods and utensils are not the only sources of kitchen contamination. Every surface, every wall and floor, every garbage can, every food-storage and food-serving area must be kept free from health-hazards. How?

Two Airkem products provide special safeguards for all these danger spots. One of them, Airkem A-3, searches out dirt and grime and dissolves them, leaves surfaces spotlessly clean. At the same time it disinfects everything it touches. It counteracts odors, too, without adding a heavy perfume or chemical smell - and creates an air-freshened effect. The other Airkem product, an odor-controlled non-toxic insecticide, actually brings insects out of the crannies where they hide and breed, and kills them in the open, where they can be seen and quickly removed.

There is really no excuse for an unsafe kitchen, pantry, cafeteria, soda fountain or sandwich bar. Daily use of these two Airkem products adds nothing to the workburden, nothing to the cost. They merely replace products currently required. Ask your nearby Airkem representative!

FREE 16 oz. can Airkem odor-controlled non-toxic insecticide. (Regular \$2.05 value.) Mail this coupon today! John Hulse, Airkem, Inc. Dept. NS 4 241 East 44th St., New York 17, N.Y. Send bulletin "Airkem Procedure for Kitchen and Cafeteria Maintenance" and FREE 16 oz. can Airkem Insecticide to School Address. Zone___State_ City_

Triumph Building Blocks Made of Safe Thermo Plastic



Triumph Building Blocks, for use in elementary schools, are covered with a rugged ABS grained thermo plastic and are filled with light, strong, high density polyurethane foam which makes them durable yet safe for children. Integral hand holes make the blocks easy to han-dle. They are manufactured by Hollywood Plastics in three sizes and colors and will not crack, or chip. American Seating Co., 800 N. Sepulveda, El Segundo, Calif.

etails circle #213 on mailing card.

High Pressure Laminate Face on U. S. Plywood Fire Door

Designed to meet the needs of hospitals, schools and other public institutions, the new United States Plywood fire door has high pressure Micarta plastic laminate faces. It combines fire protection with pleasing appearance and easy maintenance as both sides of the door are faced. It has been rated by Underwriters Laboratories

for both Class "B" vertical shaft openings and Class "C" room and corridor partition openings. The door will be custom made with incombustible Weldrok core and shipped prefitted and machined for approved hardware if desired. United States Plywood Corp., 55 W. 44th, New York 36. For more details circle #214 on mailing card.

Telematic Internal Switchboard **Expands to Meet Needs**

Developed to provide automatic internal communications, the Telematic switchboard can be expanded on the user's premwithout soldering irons or special



skills. By means of plug-in relay sets and plug-in connecting cables, it can be assembled to provide any number of stations up to 240 and as many as 32 links. The number of stations in any installation can be increased by 20 to 25 per cent by adding selective ring common talk stations. The system comprises a basic 60 line-8 link switchboard and power supply, extension frames and group selector frames. It is a self-contained unit, completely wired and equipped with necessary relays to provide a wide range of features. Dictograph Products Inc., 95-25 149th, Jamaica 35, N.Y. For more details circle #215 on mailing card.

Coronado Fluorescent Fixture Has 3 in 1 Diffusing Element

The shallow Coronado fluorescent lighting fixture line has a new three in one lens which incorporates an L-120 prismatic diffusing lens on the bottom, a linear refracting lens on the sides directing light out of



the glare zone, and a new refracting lens on top to eliminate ceiling heat. The units are designed for surface mounting and come in a new white Prisopal® lens and the clear polystyrene lens. The lens is a combination of a low brightness prismatic lens with two linear refracting lenses all in a one-piece diffusing element. The Prisopal lens adds white to the plastic, combining the efficiency of a prismatic lens with a soft diffusing white. Benjamin Div., Thomas Industries Inc., 207 E. Broadway, Louisville 2, Ky.

etails circle #216 on mailing card.

(Continued on page 198)



Buckstaff Library Installation . . . Auburn Senior High School, Rockford, Illinois

I source I responsibility

BUCKSTAFF - since 1882 - a most self-sufficient and respected maker of the finest institutional furniture. Whollyowned facilities include a sawmill, dry kilns, plastic laminating plant, chair and table factory — all located on a 20-acre site in an area where expert wood craftsmanship has never been the exception — but rather — a tradition — a matter of local pride. And, because BUCKSTAFF is all this, it means you deal with one dependable source and centralized responsibility. It means also that you get these highly desirable, exclusive library furniture advantages . . .

the quality kind

- Resilyte high pressure plastic surfacing in a selection of matching wood grains at no extra cost.
- Most extensive use of 5-Ply Maple Veneered Panels for added durability and attractiveness
- Widest choice of chairs specifically created for library use.
- Assurance of more closely matched components since Buckstaff, only, designs - manufactures - finishes all of its own furniture.

or complete information, write.

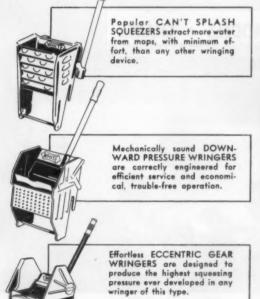
library furniture division • oshkosh, wisconsin





WHITE WRINGERS squeeze the most out of your maintenance dollar.

For speedy, efficient floor cleaning choose a heavy duty White Wringer . . . all three types are specifically engineered to do a better job.



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COMPANION "made-to-match" WHITE BUCKETS available round or oval, in 24 gauge galvanized or stainless steel, with or without casters, in sizes to fit every need.

WHITE MOP WRINGER COMPANY

Exclusive Feature — fits either round or oval bucket.

FULTONVILLE 20 NEW YORK

Bi-Directional Distribution of Educational Television

With the new RCA Bi-Directional Distribution System, it is now possible to send television signals in two directions simultaneously over the same cable arrangement. It permits closed circuit material to be introduced into the system from any classroom, while enabling re-ception of off-the-air TV signals. Thus one part of a school may receive closed circuit programming at the same time that another part is receiving off-the-air telecasts. The system can also feed television signals to a receiver in a classroom while doubling as a closed circuit TV system by permitting closed circuit signals to be fed into any other classroom for distribution throughout the school area. The system can also handle the transmission of audio and DC signals to permit two-way communications between the classroom and an instructor at another location, thus permitting questions and answers with closed circuit programming. Radio Corporation of America, 30 Rocke-feller Plaza, New York 20.

For more details circle #217 on mailing card.

Soundlock Acoustical Panel **Eliminates Annoying Transmission**

Modern building design and increasing use of movable partitions emphasize the problem of transmission of annoying sound from one room to another. Sound-lock, a low-cost metal acoustical ceiling panel, should help to solve the problem. Vertical honeycomb cells filled with

fibrous glass are adhered to a solid back and perforated face surface to seal in sound. The easily maintained panels are



four by one-inch and are available in special sizes up to two by six inches. Kemp Corp., 124 S. Woodward, Birmingham, Mich.

For more details circle #218 on mailing card.

Wireless Dictation and Recording Offered with Remote-Tape



Remote wireless dictation and recording, allowing users to range a wide distance from the actual recording machine while carrying only a compact, pocket

sized unit which contains both microphone and transmitter, is introduced in Remote-Tape. Every message dictated into the miniature dictating unit is automatically recorded by a standard Geloso Stenotype machine which can be located as much as a half mile away. The complete Remote-Tape unit consists of a wireless microphone, a receiver-control unit, an actuator which starts and stops the recording unit, and the standard Celoso Stenotape recording/transcribing unit. Due to an important design feature, the recording unit operates only when messages are actually being dictated, leaving no blank spaces on the tape, and a gating circuit makes it impossible for any other transmitter to activate the recording machine.

American Geloso Electronics, Inc., 251 Park Ave. S., New York 17.

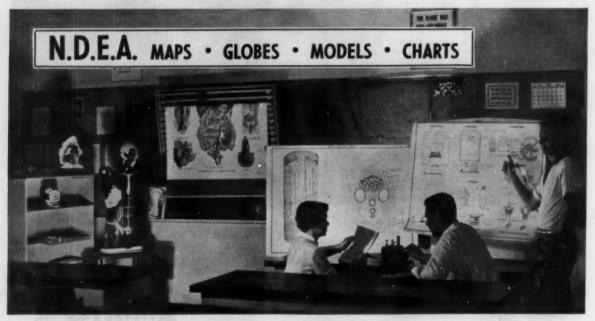
For more details circle #219 on mailing card.

Class-dex Record Book Is Compact and Complete

The Class-dex teacher class record book with new features was designed by teachers to save time and facilitate a greater degree of accuracy in record keeping. Space is provided for all required records with a large accumulative record section. Standard Class-dex provides space for six classes of 40 students for 45 weeks but it may be collated and bound to meet specific school needs. Developmental Corp. of America, 83 Clover Ave., Floral Park, N.Y.

For more details circle #220 on mailing card.

(Continued on page 200)



Nystrom instructional materials are eligible for purchase under Title 3 of the National Defense Education Act. Join the many school systems throughout the country which have enriched their science, mathematics and foreign language programs with Nystrom maps, globes, charts and biological models.

Do you have a copy of our new catalog filled with beautiful full-color illustrations of the complete Nystrom line? If not, write today for catalog No. NS-461.





In your school planning, include the beauty and quality of school furniture by All-Steel

All-Steel's complete line of steel office furniture and lockers make school layouts and planning easier and more efficient. The beautiful styling lends itself to modern schools. ASE Furniture is quality built to last and give years of fine service and performance. Whether for replacement of a single classroom teacher's desk, a completely new administrative office, or for files, storage cabinets or lockers, call your ASE dealer or write for illustrated catalog.



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DESKS . CHAIRS . L-UNITS . CREDENZAS . TABLES BOOKCASES . LOCKERS . FILING CABINETS STORAGE CABINETS



Ditto Duplicators in Color Combinations

The Ditto D-70 fully automatic electric duplicator is now available in a choice of color combinations. The versatile machine will copy an endless variety of forms, recoxds, instructions and the like on varying weights of paper or card stock in sizes from three by five to 18 by 14 inches. Any material typed, handwritten or draw on a Ditto Direct Process master can be reproduced in one to five colors in one operation. The D-70 has fifteen advanced features for ease and efficiency of operation and is offered in gray and brown, sand gray and gray and green color combinations. Ditto Incorporated, 6800 McCormick Rd., Chicago 45.

For more details circle #221 on mailing card.

ERGOF

Transvision TV Receiver Provides Six Safeguards

A 24-inch Television receiver for classroom use is introduced by Transvision to



provide safeguards against six common hazards uncovered by the company in a five-year survey conducted among schools and colleges using TV receivers in classrooms. In the new set the picture tube is shielded with a special laminated safety glass to prevent shattering; the wide base mobile stand prevents tipping; a locked back panel discourages student tampering, and a heavy-duty line cord and all wood cabinet and power transformer-type chassis prevent shock. The shadow-box cabinet design helps eliminate glare and reflections, the special sound system minimizes room echo, and improved clarity and reception are other features. Transvision Electronics, Inc., 460 North Ave., New Rochelle, N. Y.

For more details circle #222 on mailing card.

Mobile Maintenance Station has Vacuum Chamber

The Cartavac, a complete mobile maintenance service station, features a built-in vacuum chamber which cleans erasers and dry mops of every size and can be



removed for use as a vacuum or blower. Other features include shelf space for storage of cleaning utensils, equipment and supplies, and a canvas bag or barrel attachment for waste collection. The M.D. Stetson Co., 63 Brookline Ave., Boston,

For more details circle #223 on mailing card.

Smith-Corona Photocopy Line Includes Three Machines

Three new machines, which copy anything on sensitized white standard weight papers, are introduced by Smith-Corona as the Vivicopy 9, 12 and 14. Designed to help simplify copy needs of high schools and colleges, the new models can be used to copy student transcripts each year in addition to teachers' transcripts, drawings, sketches, illustrations, musical arrange-



ments and projection film for instruction. The model designations of 9, 12 and 14 are according to paper width capacity. All models operate on the diffusion transfer principle and have ready-mixed developer in a disposable, rigid plastic cartridge to eliminate any contact by the operator with chemical fluid. An automatic feed and storage system keeps the machine in readiness for use. Smith-Corona Marchant Inc., 410 Park Ave., New York 22.

For more details circle #224 on mailing card.

(Continued on page 202)

Both NEW and DIFFERENT SHELDON 15" PRECISION LATHES

NEW

New. Revolutionary double-box Headstock (Pat. Pend.) New. "WORK-HOLDING ONLY" Spindle.

New. Single-Shift Back Gear Lever on Headstock. New. Headstock and Apron run-

New. 1943 to through Spindle.
New. 1%" Hole through Spindle.
New. 50-pitch Gear Box with built-in Lead Screw Reverse.
New. Amazing LOW PRICE.

DIFFERENT

Different. Spindle rigidly held in two large "Zero Precision tapered roller bearings arranged in box-type design.

design.

Different. Electrical switches and push-button stations fully enclosed in built-in well in head-

Different. Two independent clutches in apron for selecting power feeds.

Different. Cam-action tailstock clamp for rapid release and instant locking of tailstock. Different. Triple, cogged, V-belt

Different. Triple, cogged, V-belt outboard drive—eliminates intermediate shafts—delivers more power to spindle.

This is an all new lathe that bridges the gap between conventional belt driven and geared head lathes. It combines the capacity and power of a geared head with the economy and flexibility of a belt driven lathe. Available with 5, 6' and 8' bed lengths providing 31", 42" and 66" center distances.

Send in Coupon for full information

SHELDON MACHINE CO.,	INC	4266	No.	Knox	Ave.,	Chicago	41,	U.S.A.
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The NEW and DIFFERENT SHELDON	N 15" L	athes						
☐ Sheldon ☐ 10", ☐ 11", ☐	13" L	athos						
☐ 11" and 13" Variable Speed Lat	thes							
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Sebastian 13" and 15" Goared Hood Latines	Name	*****				Title		
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Have Representative Call	City					State .		

SHELDON MACHINE CO, INC.

4266 N. Knox Avenue Chicago 41, Illinois



New, low-priced mobile folding table

Keep costs down with this economy-priced, mobile folding table—the new HOWMATIC "TN." Available in 4 sizes.

Solving your cafeteria problems on a limited budget isn't difficult. The trick is to do it without compromising on essentials.

When it comes to budgeting for your cafeteria tables, skimping's unnecessary. Not with the new economy-priced HOWMATIC "TN" available.

For all that, the new HOWMATIC "TN" offers you features available in no other table in its price range! To cite a few:

1. The HOWMATIC "TN" opens or folds in one, easy motion. Either action takes just 3 seconds. Here's why:

Folded, the HOWMATIC "TN" stands on castered legs. These free-wheeling casters roll smoothly, easily, making the unit a snap to fold or unfold.

When the HOWMATIC "TN" is folded, rubber-capped center legs remain free of the ground. The moment the table is fully open, however, these center supports come down automatically, grip the floor firmly, anchoring the unit.

2. Strength where it counts. The HOWMATIC "TN" is built around the same type of durable, all-steel chassis for which HOWE tables are noted. Steel rivets join this chassis to the table's 14-gauge tube steel legs permanently.

Chassis and legs are finished with a bright, rustproof, Cadmium plating that won't chip, never requires repainting.

- **3. Durable top.** The HOWMATIC "TN" comes with a solid, built-up top consisting of a plywood sheet covered with a layer of plastic laminate. (Your choice of patterns.) A hardboard backing adds extra strength. The entire top is trimmed with a plastic flush edge.
- 4. Compact and maneuverable. The HOWMATIC "TN" handles easily. 3", hard rubber, swivel casters insure maximum mobility—important when moving a table through crowded corridors.

Rustproof bearings assure long life, quiet, smooth, trouble-free service.

5. Safety features. Counterbalanced spring construction holds the unit in check, keeps the HOWMATIC "TN" from suddenly snapping open or slamming shut.

A 7/6" safety gap where the top's two halves would meet eliminates the danger of injured fingers. In addition, the HOWMATIC "TN"s top has 2" radius safety corners.

Another safety feature is the table's low center of gravity. When active youngsters get playful or the folded unit is moved about hurriedly, the HOWMATIC "TN"s design keeps table from tipping.

- 6. Saves valuable school activity time. No need to clean the HOW-MATIC "TN" before folding and storing. At all times, surfaces are easy to reach and clean. In addition the unit's single-fold structure and ½" center seam eliminate corners where food particles otherwise might accumulate.
- 7. Seats pupils comfortably. The HOWMATIC "TN" seats from 8-18 pupils comfortably depending on whether 6', 8', 10' or 12' units are used.



Howe Folding F	arniture, Inc., 1 Park Avenue,	N. Y. 16, N. Y.
	new, budget-priced HOWMAT	ΓΙC "TN" and NS-41
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School		V
Address		
City	Zone Stat	e





The Spitz Planetarium enables the teacher to generate the fundamental understanding of scientific methods basic to all sciences.

PLANETARIUM DIVISION - SPITZ LABORATORIES, INC. - YORKLYN, DELAWARE







What could be simpler or cleaner What could be simpler or cleaner? Just lift the seat to the desired height. No dirty knobs, wheels or tools to handle. The Ajustrite patented adjusting mechanism is the reason hundreds of thousands of Ajustrite Chairs and Stools are in service today. It's the oldest, the simplest, the fastest. And the most trouble-free—that's why we guarantee it for 10 years!

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32 Models for Factories • Schools • Laboratories • Hospitals • Offices







CHAIRS ... STOOLS

Anti-Hesive Aperture Plates Eliminate Filmstrip Sticking

The development of Viewlex Anti-Hesive Aperture Plates eliminates the problem of filmstrip sticking caused by mois-ture which remains in various types of film stock. The result of a concentrated research program undertaken at Viewlex, Anti-Hesive Aperture Plates will be standard equipment on all Viewlex Projectors and the design of the plates permits their interchangeability on all Viewlex Projec-tors made since 1950. Viewlex, Inc., 35-01

Queens Blvd., Long Island City 1, N.Y.
For more details circle #225 on mailing card.

Glass Tinting in Colors Reduces Glare and Heat

Window and structural glass areas, and even automobile windshields, can be easily



tinted to cut down on glare and heat and protect against sun-fading. Nine transparent color tints and three frosted tints are offered in the plastic coating which is applied by a flow technic and operates in the same manner as an optical filter. The coating bonds to the glass chemically and the color appears to be within the glass itself. Acorn Glass Tint, 1123 W. Century Blvd., Los Angeles 44, Calif.

For more details circle #226 on mailing card.

Flexible Wall Covering **Also Protects Counter Tops**

The Supreme series in Counter Corlon is a new flexible wall covering which serves also as a counter top or table surfacing material. Pastel vinyl accent chips give it an attractive appearance and the surface of clear vinyl makes maintenance



easy. The product is resistant to staining and can be wiped clean with a damp cloth. The flexibility of Counter Corlon permits installation without seams and it can be coved naturally into corners. Sold in sheets, in four color patterns, Counter Corlon is equipped with a special backing that is unharmed by the effects of alkaline moisture. Armstrong Cork Co., Lancaster,

For more details circle #227 on mailing card.

(Continued on page 204)

The Finish is part of the Floor

Here's a beautiful and versatile floor. Properly maintained, it takes punishment in stride. Butfar more hazardous than scuffing feet or trackedin grime, are improper and inferior floor treatments. Instead of protecting the floor, such treatments may actually damage it!

Avoid costly mis-matching of floor and treatment. Follow the specifications of the Asphalt and Vinyl Asbestos Tile Institute, choose the special. ized treatments that fit the flooring. You'll hold "new floor" beauty much longer, and you'll be money ahead in maintenance.



- *** SCRUB**
- "with a good, mild neutral cleaner... no oils, organic solvents or other injurious materials." Hillyard Super Shine-All® is the famous neutral chemical cleaner with 6-fold cleansing action, formulated safe for all flooring. UL listed "as to slip resistance".
- * FINISH
- "with an approved water emulsion wax... containing no gasoline, naphtha, turpentine or mineral solvents... Use no varnish, lacquer or shellac finishes." Hillyard Super Hil-Brite® is the finest of water emulsion, self-polishing waxes, made from 100% No. 1 imported Carnauba. Long-wearing—eliminates 2 re-waxings out of 3. UL listed "as to slip resistance".
- * SWEEP
- "using recommended compound where necessary to keep down the dust... no oil or solvent base compounds." Hillyard Super Hil-Sweep® dressing is formulated safe for resilient flooring, contains no oils, effectively controls dust. Nonslip, safe on the floor.

ON ASPHALT TILE . VINYL . RUBBER . TERRAZZO . WOOD

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BRANCHES AND WAREHOUSES IN PRINCIPAL CITIES

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Let the Hillyard "Maintaineer®" recommend treatments that meet manufacturer or associa-tion specs. He's

"On Your Staff, Not Your Payroll"

HILLYARD

SINCE	1907	
SHIFF	1307	

- Dept. E-4 HILLYARD, St. Joseph, Mo.
- Please send treatment recommendations for asphalt and asbestos vinyl. Please have the Maintaineer get in touch with me. No obligation!

For additional information, use postcard facing back cover.

R-W FOLDING PARTITIONS

For classrooms



Grace McWayne School, Batavia, Ill. Architects, R. A. Orput, Rockford, Ill.

auditoriums



University of Pittsburgh, Pittsburgh, Pa. Architects, Schmidt, Garden and Erickson, Chicago, Ill.

. gymnasiums



Shadle Park High School, Spokane, Wash. Architects, Culler, Gale, Martell and Norrie, Spokane.

A few more dollars invested initially can save you hundreds in the future. In years to come the quality, rugged strength, trouble-free operation and excellent sound retarding qualities inherent in all R-W Folding Partitions will pay dividends through reduced maintenance and repair costs. Available in a type and size to meet your exact requirements. Economically and functionally it will pay you to buy the best-R-W Folding Partitions.



GET THE FACTS Write for Catalog No. 600

?ichards-Wilcox

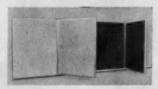
MANUFACTURING COMPANY "FOLDING PARTITION DIVISION" 520 THIRD STREET . AURORA, ILL.

Portable Transcription Player Permits Wide Speed Range

The new Bogen VP 20 Transcription player is a versatile unit with instant speed selection of 16, 33-1/3, 45 and 78 rpm. to permit varied selections to be played. Combining a full-fidelity 20-watt amplifier and speaker with the Bogen-Presto B50 professional turntable, the machine features Feather Drop automatic cueing that raises and lowers the stylus at any point on the record by the turn of a knob. It is packaged in a sturdy, lightweight carrying case. Bogen-Presto Div., The Siegler Corp., P.O. Box 500, Paramus, N.J.
For more details circle #228 on mailing card.

Multi-View Wall Mounted Panel Serves Multiple Purposes

Sections that pivot to form a chalkboard, a tackboard or a combination surface en-



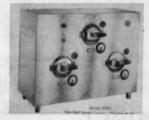
able compact Multi-View mounted panel to serve multiple purposes, and makes an attractive combination for classrooms, lecture halls and conference rooms. A white porcelain-enameled steel section that serves as a projection screen is available with the unit, and chalkboard and tackboard facing materials may be selected from the complete Son-Nel line in a wide range of colors. Son-Nel Products Co., 900 19th Ave., Oakland 6, Calif. For more details circle #229 on mailing card.

Carnival Pattern Is Custom-Colored

Custom-colored to individual requirements, Carnival china is offered in several standard two-color combinations. It is available in two shapes, the Revere for space-saving on tray or table, and the Narrim. Walker China Co., Bedford, O. For more details circle #230 on mailing card.

Flex-Seal Speed Cooker Now in Counter Model

The new Model 300-C Flex-Seal Speed Cooker is a counter model in the three-



compartment size. Developed for use where floor space is not available but large and varied production of fresh cooked vegetables is important, the Model 300-C will cook 750 servings per hour of fresh or frozen vegetables or lish without defrosting. Vischer Products Co., 2815 W. Roscoe St., Chicago 18.

fore details circle #231 on mailing card.
(Continued on page 206)



center of importance W DETROIT

• 800 fine rooms with bath, radio, TV

 Grenadier Dining Room and Lounge · Coffee Shop and

 Convention **Facilities** · Ample

Parking



DOWNTOWN DETROIT 26, MICHIGAN



Before you buy ANY folding chair . . .

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ADDRESS_	

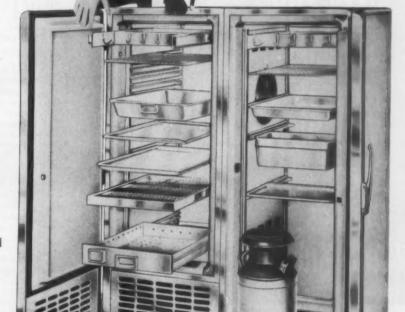
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You get 50% more useable space with no increase in floor area when our pull-out accessories are used. This permits easy access to items stored in the rear.

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Movie-Mate Projector Has Continuous Magazine

Combining the M-M Supreme sound projector mechanism with a built-in transparent continuous projection magazine which holds a loop of up to 400 feet of film, the Movie-Mate permits automatic-continuous 16mm sound projection. The compact unit can be pre-threaded, ready for use when needed without winding. The Harwald Co., 1245 Chicago Ave., Evanston, Ill.

For more details circle #232 on mailing card.

Remote Control Box for TV Is 'All-Transistorized

Developed for the new General Electric CCTV cameras, the new closed circuit

remote box has an all-transistorized, regulated power supply which keeps the voltage to the camera and its internal accessories automatically constant. A unique feature compensates for cable length up to 1500 feet. The control device is small in size and light in weight, provides a 24-volt DC regulated power supply for the new TE-9-A camera and power for all accessories. General Electric Communication Products Dept., Mountain View Rd., Lynchburg, Va.

For more details circle #233 on mailing card.

Amtico Floor Guards in Seven Types

Seven different types of vinyl casters and glides for floor protection are offered in the new line of Amtico Guards. Made of sturdy non-staining polyethylene plastic, Amtico Guards range in size from a small nail-on button glide for very light load applications to large square and round caster cups for heavy furniture. American Biltrite Rubber Co., Amtico Flooring Div., Perrine Ave., Trenton 2, N.J. For more details circle #234 on mailing card.

Improved Wall Deterger Weighs Only 25 Pounds

A redesigned and improved model of the Von Schrader Wall Deterger, constructed of stainless steel and other noncorrosive metals, weighs only 25 pounds



and is highly mobile and easy to transport. Practical for institutions, the machine cuts maintenance and cleaning costs, as one man can clean 6,000 square feet of wall space in one day. A new detergent is available for use with the Wall Deterger. Von Schruder Mfg. Co., 16th St. and Junction Ave., Racine, Wis.

For more details circle #235 on mailing card.

Science Kit Lab "300" Table Is Movable, Low-Priced Unit

The "300," a new movable laboratory table, has storage space for all requisite equipment and meets all the requirements for science in elementary or junior high schools. Of sturdy maple construction, the low-priced unit has a stain, burn and warp-resistant Formica top; heavy-gauge stainless steel sink with waste system; three electric outlets and adjustable shelves with three tote trays. Science Kit

Lab Corp., Tonawanda, N.Y.
For more details circle #236 on mailing card.

Professional Table Tennis Table Designed to Withstand Heavy Use



The Professional Model R11H Fold-N-Roll table tennis table is built to take extra heavy duty school and institutional use, and folds and locks into closed position in seconds. When closed, the top folds inward, protecting the plasticized playing surface. Brinktun, Inc., 710 N. Fourth St., Minneapolis 5, Minn.

For more details circle #237 on mailing card. (Continued on page 208)

WALK-TOP
Surfacing
Reduces
Wear On
Shoes...
Clothes...
And Kids!

Compare the smooth, grit-free Walk-Top surface above with the ordinary pavement shown right. You will easily see why this non-abrasive material reduces wear on children's shoes and clothes to a minimum.
Walk-Top "saves kids," too! Observation has

Walk-Top "saves kids," too! Observation has proved that surfacing playgrounds with Walk-Top reduces both the number and seriousness of abrasions resulting from falls.

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Wood's Model 59 Lawn Special. Exclusive floating mount follows the contour of the lawn. Undermounted for excellent visability and maneuverability.





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Literature and Services

- A comprehensive guide to effective electric typewriting instruction, "Electric Typing Methods for the Teacher," is pub-blished by Royal McBee Corp., Port Chester, N.Y. The 32-page booklet is designed to provide a detailed procedure for teaching electric typing, together with a practical approach to proper utilization of electric typewriters in the classroom.

 For more details circle #238 on mailing card.
- Broehure AE-129, Hamilton Mfg. Co., Two Rivers, Wis., presents suggestions for selecting appropriate types of spacesaving folding tables, and illustrates recessed and on-wall styles, table and bench models, staging and other portable prod-

For more details circle #239 on mailing card.

• The 1961 Series 6000 Catalog Sheet from Grade-Aid Corp., 46 Bridge St., Nashua, N.H., illustrates Grade Aid Junior Model, Economy Model and Deluxe Model Science Tables. Descriptions, specifications and lists of standard and optional accessories for Grade-Aid Portable Science Tables are also included.

For more details circle #240 on mailing card.

 The complete line of power tools and accessories manufactured by the Delta Power Tool Div., Rockwell Mfg. Co., 483 N. Lexington Ave., Pittsburgh 8, Pa., is illustrated and described in a newly revised 92-page Catalog AB-60-2. Complete specifications are included with catalog information on several recently introduced products in the line.

For more details circle #241 on mailing card.

for all grades-For complete informa-

tion and prices, send today for this

plete details of Cram's new "Tuffy"

new big, colorful Catalog No. 93. Also ask for literature giving com-

world globes.

SCHOOL AND LIBRARY DIVISION

• A new booklet called "The Revolutionary Tucker High Window Washer" describes the window washer in detail and explains how this equipment will cut maintenance time in half, prevent costly accidents and reduce supply costs. Available from Tucker Mfg. Co., 112 Fourth Ave. S.E., Cedar Rapids, Iowa, the colorful brochure illustrates the diverse institutional uses of the unit.

For more details circle #242 on mailing card

· How the Lite-Lift is raised by the touch of a hand to disclose wardrobes, pass windows or other storage areas is described and illustrated in a four-page folder prepared by S. H. Pomeroy Co., 41 Magee Ave., Stamford, Conn. Faced with chalkboards, tackboards or other wall finishes, Lite-Lift permits dual use of classroom wall areas. Unique Spiral Balances make vertical sliding of the wall facing effortless for teachers or pupils. Line drawings illustrate operation of typical Lite-Lift sections, and school and college installations are listed.

• How to keep all drains open and free-flowing without stop-ups is discussed in a four-page folder on N-zyme for Complete Sewage Control. A development of O'Cedar Div., American Marietta Co., 2246 W. 49th St., Chicago 9, N-zyme is a blend of natural enzymes and saprophytic bacteria for the natural digestion of organic solids, resulting in clean drains, lines, grease traps, septic tanks and cess-

For more details circle #244 on mailing card.

· "A New Student Financing Plan" is discussed in a folder and booklet prepared by Education Funds Inc., 10 Dorrance St., Providence 3, R.I. Fundamentals of the nation-wide, broad, flexible and simple plan are discussed with all details and background described, together with answers to a series of questions which might arise, and tables of funds advanced. Full information is also given on How to Make Arrangements. For more details circle #245 on mailing card.

• A 20-minute full-color sound motion picture for administrators, school board members, architects and others involved in school planning is available on loan from Edwin L. Wiegand Co., 7500 Thomas Blvd., Pittsburgh 8, Pa. Entitled "Electric Heating Goes to School," the film is on the subject of electric comfort heating and was filmed in a typical modern suburban community.

For more details circle #246 on mailing card.

• ASI School Shop Equipment, benches, lockers, cabinets, desks, stools and accessories, is shown in a 16-page catalog available from Angle Steel, Inc., Plainwell, Mich. Pictures and descriptions of the line are included in the booklet, as are new design ideas developed to permit freedom and flexibility in shop arrangement.

For more details circle #247 on mailing ca

• The tenth printing of the 24-page booklet, "How to Organize a Youth Center," is now available from The Coca-Cola Co., P.O. Drawer 1734, Atlanta, Ga. The booklet charts the path to follow to get a Center underway and discusses some of the advantages of the plan.
For more details circle #248 on mailing card.



730 E. Washington St. · Indianapolis 6, Ind.

Our 94th Year

· Administrator's Edition No. 110 of the Beckley-Cardy School Buyer's Guide contains 100 pages of information on classroom seating, furniture, athletic equipment, supplies, teaching material, books and other material available from Beckley-Cardy, 1900 N. Narragansett Ave., Chi-

For more details circle #249 on mailing card.

- · "Slate vs. 'Slate'" is the intriguing title of a four-page folder presenting a digest of comparative tests on Pennsylvania Slate and an imported limestone. Available from Natural Slate Blackboard Co., Pen Argyl, Pa., the leaflet defines true slate and mentions some of its uses.

 For more details circle #250 on mailing card.
- Guidance Series Booklet 149, "Do Your Dreams Match Your Talents?" is available from Science Research Associates, Inc., 259 E. Erie St., Chicago 11. Written for the high school student to help him reassess his goals and reappraise his abilities, the 44-page booklet was prepared under the auspices of the Project on Guidance and Motivation of Superior and Talented Students, and is offered at 50 cents per copy.

 For more details circle #251 on mailing card.

- Full descriptive information and illustrations on all components of the Audio Teaching Center are presented in a four-page folder on "The Guided Laboratory Program." Specifically created for education, the complete language laboratory program is available from Audio Teaching Center, 133 Hamilton St., New Haven. For more details circle #252 on mailing card.
- A new 12-page catalog on "The National Line" describes the entire line of chairs and tables manufactured by the National School Furniture Co., Odenton, Md. Featuring complete information on the construction of furniture and tops, the catalog also describes a new line introduced for faculty rooms and offices.

 For more details circle #253 on mailing card.
- Types and styles of Stan Gard chain link fence and gates recommended for institution and recreation area use are discussed and illustrated in a four-page folder available from Robertson Steel & Iron Co., 71 Elm St., Cincinnati 2, Ohio. Detail drawings show framework, fence and gate fittings and typical erected fence, and complete specifications are included.

 For more details circle #254 on mailing card.
- · How to make money with a popcorn project, how to start, finance, and operate it, and the nutritional values of popcom are some of the subjects covered in a bulletin entitled "Popcorn Belongs" offered to schools by Gold Medal Products Co., 318 E. 3rd St., Cincinnati 2, Ohio. For more details circle #255 on mailing card
- An illustrated handbook on "The Opaque Projector," describing the general nature of the equipment and offering specific suggestions for its use in various areas of education, is offered by the Visual Instruction Bureau, University of Texas, Austin 12, Tex., at \$2 per copy. Prepared by Dr. Kenneth L. Bowers, the handbook discusses the preparation of materials for projection and describes good projector practice, specialized technics, and procedures for maintenance equipment.

 For more details circle #256 on mailing card.

· Forty-eight reproductions of actual installation drawings of Bally sectional, allmetal Walk-Ins are included in a portfolio offered by Bally Case & Cooler, Inc., Dept. "P," Bally, Pa. The drawings, prepared for administrators, architects and food consultants and managers, illustrate the wide range of sizes and types of Bally Walk-In coolers and freezers.

For more details circle #257 on mailing card.

• The first edition of the Graflex Audiovisual Digest is now available from Graflex, Inc., 3750 Monroe Ave., Rochester 3, N.Y. The 48-page booklet, designed for audio-visual teachers, presents digests of articles from professional educational publications, with illustrations, and includes seven pages of product informa-

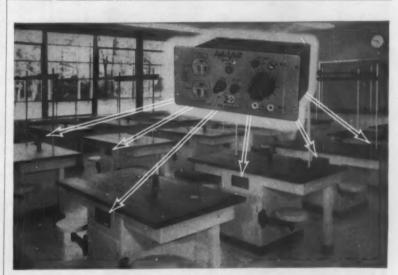
For more details circle #258 on mailing card.

· Recent developments in surfacing materials for all-weather running tracks are described in a new 19-minute, color and sound motion picture showing actual scenes from track meets and of spring training at two universities. The film is offered by American Bitumuls & Asphalt Co., 320 Market St., San Francisco 11, for showing to administrators and athletic coaches.

For more details circle #259 on mailing card.

• The many new features of the Sheldon 3R Turret Lathe are shown in close-up illustrations in a new four-page bulletin released by Sheldon Machine Co., Inc., 4258 N. Knox Ave., Chicago 41. Descriptive information and complete specifications are included.

For more details circle #260 on mailing card. (Continued on page 210)



ENRICH YOUR SCIENCE PROGRAM WITH Lab- Jolt POWER STATIONS

- · EACH INDEPENDENT UNIT PROVIDES COMPLETE, SELF-CONTAINED, VARI-ABLE A.C. AND D.C. ELECTRICAL SERVICE FOR TWO STUDENTS.
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SEND TODAY FOR A FREE SAMPLE EXPERIMENT, AND LITERATURE SHOWING HOW THE LAB-VOLT STATION CONCEPT CAN ENRICH YOUR SCIENCE PROGRAM.



• The revised 1961 catalog of maintenance products manufactured by Zep Mfg. Corp., 1310 Seaboard Industrial Blvd. N. W., Atlanta 18, Ga., is a 68-page, plastic-bound book. Descriptive information is included for the full line of maintenance and sanitation supplies as well as tools and equipment.

For more details circle #261 on mailing card.

• A 20-page booklet, "You Can Air Condition Your New School - And Cut Building Costs," discusses the economic and educational advantages of air conditioned schools. Published by Minneapolis-Honeywell, 2747 S. Fourth Ave., Minneapolis 8, Minn., it includes case histories of four new schools and compares costs of plans with and without air conditioning.

For more details circle #262 on mailing card.

· How brilliant pictures can be projected in schools and colleges, without darkening classrooms or auditoriums, with Strong Universal Arc Slide Projectors, is discussed in a brochure published by The Strong Electric Corp., 518 City Park Ave., Toledo 1, Ohio. The pamphlet also carries a table for establishing lens requirements. For more details circle #263 on mailing card.

• A new 40-page brochure released by Lennox Industries Inc., entitled "Fresh Air Electric Heating by Lennox," presents methods of heating by electricity and demonstrates the desirability of ducted systems. A brief presentation of heating products in the Lennox line is followed by a discussion of electric heating applications, including six pages of floor plans.

For more details circle #264 on mailing card.

• The story of Realock Fence, from the manufacture of the basic steel to the finished, erected product, is told in a motion picture described in a 36-page booklet available from The Colorado Fuel & Iron Corp., Continental Oil Bldg., Denver, Colo. Information on this and other company Motion Pictures is included in the

For more details circle #265 on mailing card.

• A revised edition of Bulletin 2721, "Crouse-Hinds Sportslighting," is now available from Crouse-Hinds Co., Syracuse 1, N.Y. Nearly 100 suggested lighting layouts for sports are presented in the bulletin, with general information and application data on Crouse-Hinds floodlights.

For more details circle #266 on mailing card.

• "Your School Lunch Service on Smooth Rolling Wheels" is the heading on an eight-page booklet issued by Jarvis & Jarvis, Inc., Palmer, Mass, entitled "Food Handling Trucks and How to Use them." Data include features of specialized equipment for the various operations involved in institutional food handling.

mailing card For more details circle #267 of

Film Releases

"A Time to Dance," series of nine 16mm black and white 30-min. films. "Photography - The Incisive Art," series of five 16nm black and white 30-min. films. "Crayfish Anatomy" and "Earthworm Anatomy," 11-min. films, color or black and white, for high school and college biology, college zoology and special adult classes. Audio-Visual Center, Indiana University, Bloomington, Ind.

For more details circle #268 on mailing card. "How We Elect a President," 16mm sound, color or black and white film covering all details from the first party caucus to the inauguration. Birad Corp., 1564

Broadway, New York 36. For more details circle #269 on mailing card.

"The White House: Past and Present," educational color film of 15-minute tour of White House. "Friction and Its Ef-"Column and Its Measurement,"
"Light for Beginners," "Arthropods: Insects and Their Relatives," "Heat and Its Behavior," "Muscles and Bones of the Body," "Infectious Diseases and Man-Made Defenses," "Plants That Grow From Leaves, Stems and Roots," "Electricity: How It Is Generated," and "Preparing Your Book Report," all 16mm sound, black and white or color films, 11 min. each, and "Chemical Changes All About 131/2 min. Coronet Instructional Films, 65 E. South Water St., Chicago 1. nore details circle #270 on mailing car

Middle Grades Physical Science Series, 15-film project defining basic scientific ideas for fourth through sixth grades, and covering Space, Time, Forces, Uniform Motion, Energy and Work, Waves, Vibrations, How to Bend Light, Light and Color, What Is Electric Current?, How a Magnet Can Produce an Electric Current, Fields, the Evidence for Molecules and Atoms, Electrons at Work, and Inside the Atom. Encyclopaedia Britannica Films, Wilmette, Ill.

details circle #271 on mailing card. (Continued on page 212)





Because they are designed and fabricated under the supervision of licensed professional engineers, all steel used conforms to the Standard Specifications of the American Society of Testing Materials, and the shop practices employed insures the best of quality in workmanship.

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- * Quality 3-Speed Record Player



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"Darwin's World of Nature," nine color filmstrips on Darwin Discovers Nature's Plan, The Enchanted Isles, Tropic Insects, South American Fossils, Living Animals of South America, Tierra del Fuego and the Andes Mountains, Cocos Island, Symbiosis and Evolution Today. Current Event color filmstrips on Alaska and Hawaii, modern art filmstrip showing '36 paintings of Paul Cauguin, and sound filmstrip on Market of the Sixties, all 35mm, color. Life Filmstrips, Time & Life Bldg., Rockefeller Ctr., New York 20. For more details circle #272 on mailing card.

"European Lands — Series 1," five color filmstrips for elementary and junior high social studies, covering The Netherlands, Denmark, Belgium, Switzerland and Austria. The Jam Handy Organization, 2821 E. Grand Blvd., Detroit 11, Mich. For more details circle #273 on mailing card.

Suppliers' News

Cenco Instruments Corp., 1700 Irving Pk. Rd., Chicago 31, producer of teaching equipment, announces its entry into the educational film field. The Cenco Educational Film Div. will produce science and mathematics films for all grades "to augment teaching staffs and to help them meet the growing need for scientifically trained students."

Edwards Company, Inc., Connecticut Ave., Norwalk, Conn., manufacturer of electric and electronic control, communications and protection equipment, introduced its new corporate symbol and signature recently. Designed to reflect the progressive outlook of the company, the new symbol consists of a bold letter "E" centered within an inverted triangular shield.

Encyclopaedia Britannica, Inc., 425 N. Michigan Ave., Chicago 11, publisher of the 24-volume Encyclopaedia Britannica, an adult reference work, announces purchase of F. E. Compton & Co., 1000 N. Dearborn St., Chicago 10, publisher of Compton's Pictured Encyclopedia, a 15-volume reference set for grade and high school reference. Compton's will operate under its own name and at its present Chicago offices as a completely separate entity, according to the report.

Product Research Co., 2919 Empire Ave., Burbank, Calif., was granted an exclusive manufacturing and sales license for the prefabricated Toplite Panel for skylighting by Owens-Illinois and Kimble Glass. Toplite is a marriage of the Owens-Illinois Prismatic Glass Skylight unit and the weather-sealing Rubber Calk developed by Products Research Company now marketing the finished product.

Toro Mfg. Corp., 3042 Snelling Ave., Minneapolis 6, Minn., manufacturer of power mowing equipment, and C.I.T. Financial Corp., announce an arrangement whereby hospitals, schools and colleges may lease power mowing equipment or finance its purchase on installment terms. The plan applies to institutional power mowers and other equipment handled by Toro.

Norton Door Closer Co., Div. of The Yale & Town Mfg. Co., manufacturer of rack and pinion door closers for more than 80 years, announces opening of a new general office building and national distribution center at 372 Meyer Rd., Bensenville, Ill.

Educational Electronics Division, Thompson Ramo Wooldridge Inc., newly formed as a sales and marketing group for the commercial electronic products manufactured and sold to the educational market by Magnetic Recording Industries, Dage Television, Bell Sound and Bell-Canto, all divisions or subsidiaries of Thompson Ramo Wooldridge Inc., announces removal of its offices from 126 Fifth Ave., New York, to a new building at 532 Sylvan Ave., Englewood Cliffs, N.J. The MRI Language Laboratories, Dage Educational TV Systems, Bell Tape Decks and pre-recorded educational materials produced by Bell-Canto have been integrated into the newly formed division and are being sold through it to elementary, high, private and parochial schools and colleges as well as to hospitals.

The Wakefield Company, Vermilion, Ohio, manufacturer of lighting equipment, announces the merger of its company and several subsidiary companies with Abrasive & Metal Products Co., Detroit, into a new Wakefield Corporation "in the interest of diversification." Purchase is also announced of the Art Metal Company of Cleveland, manufacturer of lighting equipment.

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Mason & Hamlin

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SAFETY IN NUMBERS

It's a wise administrator who has at his fingertips up-to-date information on new developments in equipment and materials which will serve his institution best. Look at the numbers in the yellow sheet in the back of this issue. Each advertiser listed in the index has an identifying number—so does each entry in the "What's New" section. Use these numbers on the yellow postage-paid return cards to request information on products in which you are interested—to be sure the product information you need is in your hands and current.

INDEX TO ADVERTISEMENTS

USE THIS PAGE TO REQUEST PRODUCT INFORMATION

The index on this and the following page lists advertisements in this magazine alphabetically by manufacturer. For additional information about any product or service advertised, circle the manufacturer's key number on the detachable postcard and mail it. No postage is required.

Products described in the "What's New" pages of this magazine also have key numbers which appear in each instance following the description of the item. For more information about these items, circle the appropriate numbers on the postcard and mail it, without postage, to The Nation's Schools.

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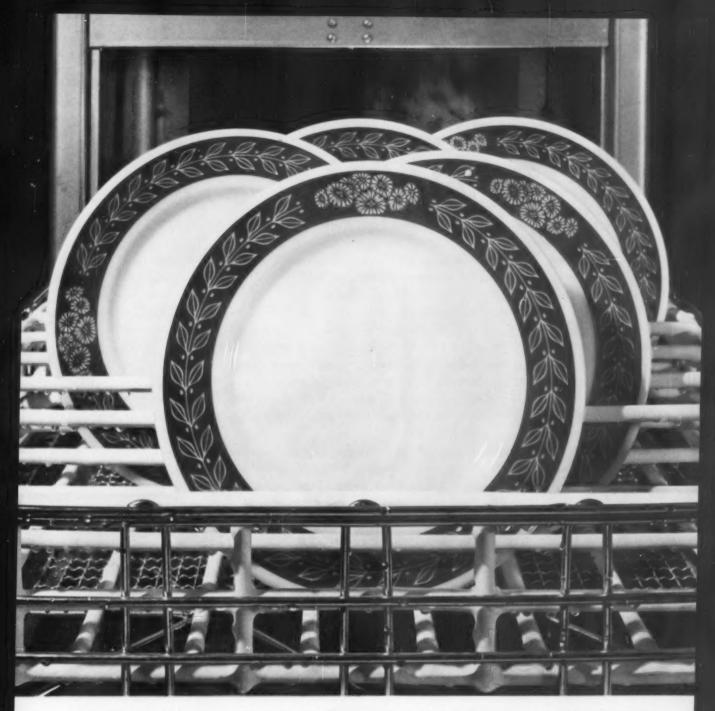
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